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## Introduction and Overview

The Social Security Administration (SSA) began publishing poverty statistics in the early 1960s, using a poverty measure developed by staff economist Mollie Orshansky (1963, 1965a). This measure had a set of poverty thresholds for different types of families that consisted of the cost of a minimum adequate diet multiplied by three to allow for other expenses. The threshold value for the base year 1963 for a family of two adults and two children was about \$3,100. To determine a family's poverty status, its resources, defined as before-tax money income, were compared with the appropriate threshold.

In 1965 the Office of Economic Opportunity (OEO) adopted the SSA thresholds for statistical and program planning purposes; in 1969 the U.S. Bureau of the Budget (now the U.S. Office of Management and Budget) issued a statistical policy directive that gave the thresholds official status throughout the federal government. The Census Bureau took over the job of publishing the official annual statistics on the number and proportion poor (the poverty rate) by comparing the SSA thresholds to estimates of families' before-tax money income from the March Current Population Survey (it first issued poverty statistics in August 1967).<sup>1</sup> For these comparisons, the SSA thresholds are updated annually for price inflation and so are not changed in real dollar terms: in other words, the 1992 threshold value of \$14,228 for a family of four (two adults and two children) represents the same purchasing power as the 1963 threshold value of about \$3,100 for this type family.<sup>2</sup>

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<sup>1</sup> See Fisher (1992b, summarized in 1992a) for a detailed history of the origins and development of the official U.S. poverty measure.

<sup>2</sup> We cite the 1992 threshold here and elsewhere because the latest data available to us were for that year.

The official poverty measure has important effects—direct and indirect—on government policies and programs. Some government assistance programs for low-income people determine eligibility for benefits or services by comparing families' resources to the poverty thresholds or a multiple of them.<sup>3</sup> Also, some formulas for allocating federal funds include state or local poverty rates as a factor.

The poverty measure influences policy making more broadly as an indicator of economic well-being to which policy makers, advocates, analysts, and the general public are sensitive. Trends in poverty rates over time and differences in poverty rates across population groups are often cited as reasons that a particular policy (or set of policies) is, or is not, needed. For example, the recent expansion of the Earned Income Tax Credit (EITC) was prompted by statistics on poverty among working families.

The poverty measure also plays a role in evaluating government programs for low-income people and, more generally, the effects of government policies and economic growth on the distribution of income. In academia, there is a large literature on the characteristics of the poor, factors leading to poverty and other kinds of deprivation, and the effects of poverty on other behaviors and outcomes.

Consequently, each year's poverty figures are sought by policy makers, researchers, and the media, who look to see if the rate has changed for the nation as a whole and for specific population groups and to understand the causes and consequences of changes in the rate and their implications for public policy. For all of these users, it is critical that the measure provide an accurate picture of trends over time and of differences among groups, such as children, the elderly, minorities, working people, people receiving government assistance, people in cities, and people in rural areas.

Poverty statistics regularly make the headlines, but, increasingly over the past decade, so do stories that question the soundness of the concepts and methodology from which the official numbers derive. In response to a request of the U.S. Congress, the Committee on National Statistics of the National Research Council established a study panel to address the concerns about the poverty measure and also to consider related conceptual and methodological issues in establishing standards for welfare payments to needy families.

Our panel—the Panel on Poverty and Family Assistance: Concepts, Information Needs, and Measurement Methods—has concluded that revisions to the current poverty measure are long overdue. We have developed a new measure, embracing both the concept of the poverty standard or threshold

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<sup>3</sup> Most of the programs that relate eligibility to the poverty measure actually use the poverty guidelines, which were originally developed by OEO and are issued annually by the U.S. Department of Health and Human Services. The poverty guidelines are constructed by smoothing the official thresholds for different size families (see Fisher, 1992c). For historical reasons, the guidelines are higher than the thresholds for Alaska (by 25%) and Hawaii (by 15%).

itself (i.e., the standard of need), how it is updated over time, and the definition of families' resources that are available to meet this poverty standard. We considered the relevance of our proposed poverty measure—and other factors—for setting standards for government assistance programs. Although we offer few recommendations in this latter area, we try to illuminate and clarify the issues.

This overview presents the panel's findings, conclusions, and recommendations in a nontechnical way, for the general reader. The other chapters of this report discuss the issues involved in poverty measurement in detail: alternative concepts for developing and updating poverty thresholds (Chapter 2); alternative adjustments of the thresholds for different family circumstances, such as family size and geographic location (Chapter 3); alternative definitions of family resources (Chapter 4); data requirements for implementing the panel's proposed poverty measure and the effects on the distribution of poverty (Chapter 5); other issues in poverty measurement, such as the time period and unit of economic analysis covered (Chapter 6); and the potential relationship of the poverty measure to government assistance programs, both generally (Chapter 7) and, specifically, to the program for Aid to Families with Dependent Children (Chapter 8). Appendices provide additional information on specific topics.

In this overview we first explain what we mean by economic poverty, in contrast to other types of deprivation. We then describe the current official U.S. poverty measure and assess its adequacy. We also review alternative poverty measures, summarizing their merits and limitations. We base our choice of a measure on scientific evidence to the extent possible; however, we stress that the decision to recommend a particular measure (and the specific features of a measure) ultimately cannot rest on science alone, but also involves judgement. We describe the criteria that we used to guide our judgements. We then present our recommendations for the poverty measure. Finally, we present our findings and views regarding the applicability of our revised poverty measure for eligibility standards and payment levels in assistance programs for low-income families.

## WHAT IS POVERTY?

We define poverty as economic deprivation. A way of expressing this concept is that it pertains to people's lack of economic resources (e.g., money or near-money income) for consumption of economic goods and services (e.g., food, housing, clothing, transportation). Thus, a poverty standard is based on a level of family resources (or, alternatively, of families' actual consumption) deemed necessary to obtain a minimally adequate standard of living, defined appropriately for the United States today.<sup>4</sup>

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<sup>4</sup> We refer to "family resources" throughout this report, as distinguished from the country's economic resources, more broadly defined. Properly, the term should be "family or unrelated individual resources" (or needs) to accord with the units for which poverty is currently measured.

There are many other forms of deprivation. One can be deprived of psychological or social well-being (e.g., one can have impaired self-esteem or heightened anxiety and stress or be socially isolated), and one can lack physical well-being (e.g., one can have a chronic disease or disabling condition or be subjected to a high risk of violence in one's neighborhood). There are also many conditions that can lead to deprivation on one or more of these dimensions. For example, people who live with a family member who abuses drugs or alcohol likely suffer deprivation in terms of their psychological health, and perhaps their physical health and economic standard of living as well. People who live in a crime-ridden neighborhood may be deprived in a number of ways—through the psychological fear they are likely to harbor, the actual physical harm or property loss that they may experience, and the adverse social and economic effects (e.g., declining property values) that may result because the broader society shuns their neighborhood. People who are illiterate may experience many deprivations to full participation in society: they may have great difficulty in finding and keeping a good job; they may have problems in traveling around their area or in negotiating a good price for the products they buy; they may avoid voting for public office; and they may experience social shame. People who are without health insurance may be at risk of psychological and economic, as well as physical, deprivation. People who lose their job or who have never been successful in finding one may suffer a deprivation of both income and psychic esteem. Finally, people who, for one or another reason, lack sufficient resources to provide for an adequate standard of living may suffer not only economic hardship, but psychological stress and physical problems as well.

We encourage the development of indicators for monitoring trends over time and among population groups on all of these different dimensions of deprivation. Also, we encourage work on the relationships among them. For example, one element of economic or material deprivation may be inadequate housing, which, in turn, can imply exposure to risks that go well beyond income inadequacy (e.g., fire hazard, lead poisoning). For fuller understanding and to inform policy, a breadth of information and analysis is needed on the well-being of the population, including and going beyond the economic dimension.

But the focus of our work is on economic deprivation, narrowly defined. We are concerned with the concept, definition, and measurement of economic poverty, or what many call material poverty. We contend that this relatively narrow conceptualization of poverty is appropriate for an official poverty measure for several reasons. First, it is a familiar concept that, in a broad sense, has formed the basis of official poverty measurement in the United States for the past several decades. It is a notion of poverty that accords with political rhetoric as least as far back as Franklin D. Roosevelt's concern for Americans who were ill-housed, ill-clad, and ill-nourished.

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Second, while it is surely not easy to arrive at a specific concept or measurement of economic deprivation (see below), the same problem applies to other kinds of deprivation, and the notion of economic deprivation has the advantage that policy makers and the public have experience with its measurement and intuition about its interpretation and movement over time. Third, since many public programs and debates pertain to the economic sphere of life, it is important to have a time-series measure of economic deprivation. If a broader concept for the official "poverty" measure were adopted, there would still be a need for a measure to track the effects of programs and policies on the economic domain.

The nation's understanding about and commitment to the alleviation of poverty has been informed for many years by the official measure of economic deprivation. We think the function of that measure should be retained much as it is now. If the current measure were internally consistent and not flawed, in ways we describe below, we would be inclined to recommend its continuation. But we do find it unacceptably flawed for its important uses with respect to government policies and programs, academic research, and public understanding; thus, we recommend a new measure, but one that retains the concept of economic deprivation as the core notion of poverty.

This concept of poverty must be distinguished from "welfare" and "well-being." Poverty is a circumstance, defined by a set of specific conditions that are considered to reflect economic deprivation. One is said to be "in poverty" if those conditions are met (i.e., if one's resources are below a threshold level for needed economic consumption) and "not in poverty" if those conditions are not met. Welfare is a term for certain government assistance programs or the resources that are transferred by those programs, such as Aid to Families with Dependent Children. More generally, the term welfare is sometimes used to mean well-being, which is a much broader term capturing the overall condition of a person. In contrast, "economic poverty" refers to a circumstance defined by a low level of material goods and services or a low level of resources to obtain those goods and services. This distinction is maintained by the concept of poverty that we use here.

While we use economic deprivation as the underlying concept of poverty and devote most of this report to its definition and measurement, we acknowledge that it is not easy to specify in a precise manner what it means to be economically deprived, even in a narrow sense. The general idea certainly seems intuitive and transparent. For instance, Adam Smith as far back as 1776 linked economic poverty to the want of "necessaries," which he defined as "not only the commodities which are indispensably necessary for the support of life, but whatever the custom of the country renders it indecent for creditable people, even of the lowest order, to be without." Commonly, such a concept is translated into a dollar level that is deemed adequate to obtain necessary goods and services. The official U.S. poverty measure

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was developed along these lines, although only one "necessity"—a minimum diet—was specified; other necessary consumption was subsumed in the multiplier of three applied to the costs of the minimum diet.

More recently, Townsend (1979, 1992:5, 10) has given a social dimension to economic deprivation. Townsend observes that people are "social beings expected to perform socially demanding roles as workers, citizens, parents, partners, neighbors, and friends." He argues that economic poverty should be defined as the lack of sufficient income for people to "play the roles, participate in the relationships, and follow the customary behavior which is expected of them by virtue of their membership of society." As an example, one could argue that having a telephone is essential in a developed country for everything from job seeking to having relationships with family and friends.

Given a concept such as Smith's or Townsend's or, indeed, virtually any concept of economic deprivation, the issue is how to define the key terms—"necessaries," "indecent...to be without," "customary behavior." Although there may be a general sense in a society of what are "necessities" or what is "customary behavior," the attempt to be specific inevitably raises questions and leads to debate about the very meaning of economic poverty.

Throughout this report, our approach is pragmatic. We first assess how well the official U.S. poverty measure is serving as a barometer and benchmark for policy, research, and general public understanding about an important aspect of deprivation. We conclude that, given socioeconomic and public policy changes since the measure was developed, it is no longer satisfactory for those purposes. We then review the properties of some common alternative measures to determine which of them could represent an improvement. Our goal is not to develop the ideal poverty measure on which everyone would agree (which surely does not exist), but to propose a measure that is a marked improvement over the current one—just as the official measure, when first developed by Mollie Orshansky, was regarded as a marked improvement over competing measures at that time.

Our measure includes a specific concept of economic poverty by which to develop a new poverty threshold for a reference family type: inadequate resources to obtain basic living needs. We define those basic needs as food, clothing, and shelter. There are other needs as well (e.g., personal care, transportation), but there is less agreement about them, and so our approach provides a small amount for other needed spending by means of a multiplier that is applied to the amounts for food, clothing, and shelter.

This concept of poverty as insufficient resources for basic living needs accords with traditional public concerns for the needy, whether expressed in provisions for homeless shelters, soup kitchens, and clothing drives, or the provision of cash or in-kind benefits for basic consumption. It is also not inconsistent with and, in our view, improves on, the concept that was originally used to derive the current thresholds, namely, the application of a multiplier for other needed spending to a minimum allowance for food.

Yet general agreement about basic needs does not mean that everyone agrees about the level of consumption that distinguishes a state of poverty from a state of adequacy. Thus, there is a question about how much food, shelter, and clothing distinguish a person in poverty from one who is not in poverty. This question cannot be answered in the abstract. No concept of economic poverty, whether ours or another, will of itself determine a level for a poverty threshold. That determination necessarily involves judgement. Moreover, as we show below and in [Chapter 2](#), no matter what the particular concept, the determination of a poverty threshold invariably considers people's actual spending patterns and hence, inevitably, has a relative aspect.

Under our threshold concept, we propose that the values for food, shelter, and clothing—the basic bundle—and for a small amount of other needed spending—the multiplier—be developed by direct reference to spending patterns of American families below the median expenditure level. More important, we propose that real changes in spending on food, clothing, and shelter be used to update the poverty thresholds each year. By so doing, the thresholds will maintain a relationship to real changes in living standards, but only to the extent that these changes affect consumption of basic goods and services that pertain to a concept of poverty, not all goods and services. In this sense, our concept is quasi-relative in nature.

Because the most judgemental aspects of any poverty measure concern the reference family threshold, there is a danger that the need to improve the official measure may founder on debates about the "right" concept and level of that threshold. (We do not recommend a particular value for that threshold; rather, we suggest a range within which we believe it could reasonably fall.) It is important that a threshold concept satisfy the criteria we outline below and that the level chosen for the threshold is credible, but other characteristics of a poverty measure are equally or more important. Significant improvements will result in the accuracy of official U.S. poverty statistics by implementing our recommendations for adjusting the threshold along the three dimensions of family composition, geographic location, and time period and by implementing our recommended definition of family resources. It is in these recommendations that we are confident that the new measure of poverty is a considerable improvement over the current official measure.

Finally, by focusing on and recommending a specific measure of economic poverty, as we do, we do not advocate the idea that there is but a single measure of economic deprivation that should be featured as sacrosanct in policy evaluations. Rather, we urge the Census Bureau to develop reports on a range of poverty statistics, just as the Bureau of Labor Statistics (BLS) publishes a range of unemployment statistics in addition to the official unemployment rate. Examples of such useful poverty indicators, in addition to the poverty rate itself, would include measures of the intensity of poverty in terms of the average income and distribution of income of the poor.

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## THE OFFICIAL U.S. POVERTY MEASURE

### Development of the Measure

The poverty thresholds that are used in estimating the official U.S. poverty statistics were originally developed by SSA staff economist Mollie Orshansky as the cost of a minimum diet times a "multiplier" (or factor) of three to allow for other needed expenses, such as housing and clothing. The diet was constructed by the U.S. Department of Agriculture (USDA), by examining data on the food-buying patterns of lower income households from a 1955 Household Food Consumption Survey, modifying the patterns to develop a nutritionally balanced food plan, and costing out the items included in the plan. The USDA developed several food plans at varying cost levels; the one used as the basis of the poverty thresholds was the "Economy Food Plan," the lowest cost plan designed for "temporary or emergency use when funds are low."<sup>5</sup> The plan allowed for no eating at restaurants, called for careful management of food storage and food preparation, and was acknowledged by its developers to provide a nutritious but monotonous diet. The multiplier of three was derived from the same 1955 survey, which showed that the average family of three or more persons—the average of all such families, not the average of low-income families—spent about one-third of its after-tax money income on food.

The poverty thresholds were varied to account for the differing food needs of children under age 18 and of adults under and over age 65 and to account for economies of scale for larger households. Originally, the thresholds also varied by the gender of the family head and whether or not the family resided on a farm and could be expected to grow some of its own food. The thresholds are the same across the nation; there are no allowances for differences in cost of living in different geographic areas. Each year the thresholds are updated for price inflation by the Census Bureau.

In 1969 the Bureau of the Budget gave official status to the following two changes in the poverty thresholds, which were adopted by an interagency committee: to use the overall Consumer Price Index (CPI) to update the thresholds for price changes instead of the Economy Food Plan cost index and to raise the farm thresholds from 70 to 85 percent of the nonfarm thresholds. (Turned down was an SSA proposal to revise the thresholds to reflect newer data from the 1965-1966 Nationwide Food Consumption Survey; see Fisher, 1992b:38-49.) In 1979 Carol Fendler of the Census Bureau wrote a paper with Orshansky describing various possible changes that could be made in the poverty thresholds, including a revision of the thresholds using a multiplier of

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<sup>5</sup> Orshansky also developed a set of poverty thresholds on the basis of the Low-Cost Food Plan, the second lowest cost of four USDA plans, but these thresholds were never adopted for official use.



3.4 derived from the 1965-1966 survey. In 1979-1980, an interagency committee was asked to consider possible small changes in the thresholds (not including the use of a higher multiplier) and recommended the following minor changes discussed by Fendler and Orshansky, which were adopted in 1981: the nonfarm thresholds were applied to all families; the thresholds for families headed by women and men were averaged; and the largest family size category for the thresholds was raised from families of seven or more to families of nine or more persons (Fisher, 1992b:64-68).

Overall, except for the minor changes in the number of different thresholds and the change in the price index for updating them, the poverty line has not been altered since it was first adopted in 1965. In the language of poverty measurement, the United States has an "absolute" poverty threshold that is updated for price changes but not for real growth in consumption. Thus, the poverty line no longer represents the concept on which it was originally based—namely, food times a food share multiplier—because that share will change (and has changed) with rising living standards. Rather, the poverty threshold reflects in today's dollars the line that was set some 30 years ago.

Each year, the official thresholds are compared with an estimate of resources for each family (or individual) in the March Current Population Survey (CPS), which includes about 60,000 households, to determine the number and proportion poor (the poverty rate). Resources are defined as before-tax money income from all sources—for example, earnings, pensions, interest, rental income, other income from assets, cash welfare. Although the multiplier of three used in constructing the poverty thresholds was based on after-tax income, there was no methodology for calculating taxes from the March CPS, so income is defined on a before-tax basis. No valuations for in-kind benefits, such as food stamps, are included in income, nor are asset holdings accounted for in any way. Since 1982 the Census Bureau has published poverty estimates that do exclude most taxes from income and do include the value of major in-kind benefits, but these estimates are labeled "experimental" and do not represent the official statistics (see, e.g., Bureau of the Census, 1993a, 1995). The official poverty statistics for the United States, based on the March CPS, are currently published each fall as a Current Population Report in the P-60 Series (for the latest such report, see Bureau of the Census, 1995).

### **Adequacy of the Current Measure**

There are several different approaches to developing a measure of poverty, both for the thresholds and for the definition of family resources, each of which has some merit and none of which is without difficulties. So one might ask why the United States should consider replacing a measure that has served for many years. Moreover, it will undoubtedly be disruptive to an important statistical time series if a different measure is adopted.

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Yet, historically, poverty measures have tended to reflect their time and place. When it was adopted by OEO for official use, the SSA measure was viewed as a distinct improvement over a widely cited measure developed by the Council of Economic Advisers (CEA) for 1962. The SSA thresholds were based on an explicit concept of need and were adjusted for family size and other characteristics; the CEA measure had just one threshold for families of all sizes with a second, lower threshold for single individuals. The SSA measure also had the advantage that its central threshold for a family of four in 1963 was about the same as the CEA family threshold of \$3,000. In turn, the CEA family threshold had been based on considering such factors as the minimum wage and public assistance levels; see Fisher (1992b:30). Gallup Poll data from the early 1960s, as analyzed by Vaughan (1993), suggest that public opinion would also have agreed with a four-person family poverty threshold of about \$3,000. Also, such a level represented about one-half median after-tax four-person family income, which is a standard often used in comparative analyses of poverty across nations. In other words, the SSA thresholds accorded well with other views about what it meant to be poor in America in the mid-1960s.

Yet if the SSA approach of developing the thresholds as food costs times a food share multiplier were to be used today, it would produce a different result from the current thresholds—which represent the original 1963 thresholds adjusted for inflation—because changes in consumption patterns have increased the multiplier. Similarly, the use of the SSA approach for a period earlier than 1960 would have given a different result from the official thresholds extended back in time in real dollars because the multiplier would have been lower.

Two questions in evaluating the current poverty measure are whether it makes sense to continue to use the real value of the original 1963 thresholds and, if not, whether the original SSA approach or some other procedure should be used to update them. From the perspective of providing accurate comparisons of poverty status across population groups and across time, there is also the important question of whether other aspects of the current measure—namely, the adjustments to the thresholds for family size and type and the definition of family resources—remain relevant at the end of the twentieth century. Given the important role that the poverty measure and poverty statistics play in contemporary U.S. society, it seems imperative to make the most careful assessment possible of the current measure to determine its adequacy.

We find that the current official poverty measure has a number of weaknesses, involving both the thresholds and the definition of family resources. (Some of these problems were pointed out in the 1960s by Orshansky herself.) Although they were not necessarily important or obvious at the time the measure was adopted, these problems have become more evident and more consequential because of far-reaching social and economic changes, as well as

changes in public policy, that have occurred since the 1950s and 1960s. These changes involve labor force participation, family composition, geographic price differences, growth in medical care costs and benefits, government taxation, the provision of in-kind benefits to families and individuals, and the overall increase in the standard of living.

### **Work Patterns of Families with Children**

Over the period from 1955 (the date of the survey underlying the original poverty thresholds) to 1993, the percentage of women with a child under age 6 who were in the labor force more than tripled, increasing from 18 to 58 percent. During that same time, the labor force participation rate of women whose youngest child was age 6 or older almost doubled, increasing from 38 to 75 percent (U.S. House of Representatives, 1994: Table 12-1). As a consequence of these changes, there are many more families who must make arrangements for child care in order to earn at least some of their income.

Child care expenditures were a negligible component of consumer expenditures in the 1950s; at that time, one could readily assume that in most U.S. families a parent was available at home. Today, one can no longer make that assumption, and many families face high out-of-pocket child care expenses. Estimates from the 1991 National Child Care Survey are that 57 percent of families with working mothers of pre-school-aged children paid cash for child care and that child care expenses for the average family with such expenses amounted to 10 percent of total family income (U.S. House of Representatives, 1994: Table 12-8). The current poverty measure does not distinguish between families with and without these expenses, either by having separate thresholds for working and nonworking families or by deducting child care costs from earnings; hence, the current measure does not accurately portray the relative poverty status of these two groups.

### **Composition of Families and Households**

Among families with children, one of the most dramatic changes over the past few decades has been the rise in the number that are headed by a single parent, most often a woman: such families increased from 11 to 26 percent of all families with children over the period 1970-1992. As a proportion of all households, single-parent families increased from 5 to 8 percent over the same period (see Bureau of the Census, 1993d: Tables 65, 75). In order to work, such single parents face the problem noted above of finding—and, in many instances, paying for—child care.

Concurrent with the rise in the number of single-parent families is the growth in the number of people who live apart from their children. Many noncustodial parents pay child support, which means that they have fewer

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resources with which to support their own households. One study of men aged 18-54 estimated that about 16 percent were noncustodial parents, of whom 44 percent paid child support. On average, these payments accounted for 9 percent of their family income (Sorenson, 1993). Again, the current poverty measure does not distinguish between families with and without these expenses, so that it does not accurately reflect the relative economic status of the two groups.

Among all households, a striking change has been the growth in nonfamily households, which increased from 15 to 30 percent from 1960 to 1992 (Bureau of the Census, 1993d: Table 65). Most nonfamily households consist of persons living alone (84% in 1992). One of the concerns that has been raised about the current poverty measure is the nature of the adjustment to the thresholds for single persons relative to families—an application of what is termed the "equivalence scale." A change in the scale value for persons living alone would likely affect the total poverty rate as well as the rate for that group, given the large and growing proportion that single adults represent of all households.

Multiperson nonfamily households (including cohabitators and roommates), although smaller in numbers, exhibited even higher growth rates over the 1960-1992 period, increasing from 2 to 5 percent of all households (Bureau of the Census, 1993d: Table 65). The current poverty measure treats each member of such a household as a separate economic unit, but to the extent that cohabitators and roommates share resources and hence benefit from economies of scale, the current measure likely overstates the poverty rate for such people.

Finally, households headed by someone aged 65 or over increased from 18 to 22 percent of all households between 1960 and 1992 (Bureau of the Census, 1967: Table 18; 1993d: Table 67). Most such households are comprised of a single person or a married couple. One of the most widely criticized aspects of the official measure is that the thresholds for one- and two-person units headed by someone aged 65 or over are lower than the thresholds for other such units. This difference resulted from the USDA diets, which assumed lower caloric requirements for older people. A change in the threshold values for older household heads relative to younger heads might affect both the total poverty rate and the distribution of poverty across groups.

### **Geographic Differences in Prices**

Measuring differences in consumer prices across geographic areas of the country is a difficult task, yet there is evidence suggesting that such differences exist to a significant extent. In 1981, the last year for which BLS published family budgets for various locales, the relative cost of the lower level budget was higher in metropolitan areas than in nonmetropolitan areas and in the West and (to a lesser extent) the Northeast than in the South (Bureau of Labor

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Statistics, 1982: Table 4).<sup>6</sup> Furthermore, over the period 1982-1992, prices have increased at a faster rate in the Northeast and West than in the Midwest and South (Bureau of the Census, 1993d: Table 761). Interarea price differences appear to be especially large for shelter; housing costs ranged from 52 to 183 percent of the national average in one study of metropolitan areas for 1989 (Kokoski, Cardiff, and Moulton, 1992). Yet the current poverty measure has the same poverty threshold for all regions and types of areas.

### **Increases in Medical Care Costs and Benefits**

Per capita medical care spending has increased dramatically over the past few decades, rising from \$1,166 to \$2,566 over the period 1970-1990 (in 1990 dollars) (Moon, 1993). Health insurance coverage—including Medicare, Medicaid, and employer-provided insurance—has increased substantially as well. As a consequence, individuals' out-of-pocket costs for medical care (including insurance premiums) have declined as a share of total costs. However, their out-of-pocket costs in real dollar terms have actually increased somewhat—from \$478 in 1963 to \$597 in 1990 (Moon, 1993:23). One reason is that not everyone has insurance; another reason is that people with insurance coverage often contribute to the premiums and pay for a part of covered expenses. Also, there is wide variation in both total and out-of-pocket medical care costs by such characteristics as age, health status, and type of insurance coverage. Yet the current poverty measure does not distinguish among the health care needs of different kinds of families, nor does it reflect the role of insurance coverage in reducing families' medical care expenditures.

### **Taxes**

When the U.S. poverty measure was first developed in the 1960s, the burden of income and payroll taxes on the low-income population was relatively light. Hence, the use of a before-tax definition of income to compare with thresholds that were developed on an after-tax basis was not problematic. However, there have been periods when the tax burden on low-income people has been relatively high. One estimate is that the effective federal individual income tax rate on the poorest 10 percent of the population increased from about 1 percent in 1966 to about 4 percent by 1985, and the effective Social Security payroll tax rate for this group increased from about 3-5 percent in 1966 to about 9-11 percent in 1985 (Pechman, 1985). Because

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<sup>6</sup> There are problems in using the BLS family budget data to infer differences in the cost of living across geographic areas (e.g., the composition of the budgets differed across areas). However, Sherwood (1975) continued to find such differences in an analysis that made the budgets more comparable (see [Chapter 3](#)).

the official poverty measure uses a before-tax definition of family resources, it did not capture the adverse effects of these tax policy changes for low-income working families. Subsequently, expansion of the Earned Income Tax Credit reduced the tax burden on low-income working families, but the official measure similarly could not capture the ameliorative effects of this policy change.

### **Provision of In-Kind Benefits**

When the U.S. poverty measure was first developed, there was relatively little provision of public or private benefits to the low-income population in the form of goods or services; since then, such benefits have expanded dramatically. As just one example, the Food Stamp Program did not operate nationwide in 1970; in 1993 it provided benefits to 10 percent of the population (U.S. House of Representatives, 1994: Table 18-9).

There are difficult problems of assigning monetary values to many in-kind benefits: for example, valuing a benefit like public housing at the full cost to the government may overstate the value to recipients, who might accept less money than the cost of the housing. Particularly difficult is the treatment of medical care benefits, whether public benefits (such as Medicaid and Medicare), benefits from employer-provided insurance, or uncompensated services provided by emergency rooms. It is easy to make sick people look like rich people by assigning monetary values to their medical care benefits, even when they have little or no other income with which to obtain such essentials as food and housing. Nonetheless, if in-kind benefits that are largely equivalent to money and that support consumption are not counted as income, the extent of poverty among the recipients is overstated. Such an approach also understates the efficacy of government income support measures, which have increasingly favored in-kind benefit programs.

### **Increase in the Standard of Living**

When the official poverty measure was first developed for 1963, the threshold of about \$3,100 for a four-person family represented about one-half median after-tax four-person family income (see Vaughan, 1993). Between 1963 and 1992, median after-tax four-person family income increased by 28 percent in real terms, but the thresholds remained constant. Families' total expenditures also increased in real terms, and spending on nonfood items rose more rapidly than spending on food: expenditures on food accounted for one-third of the total in the 1950s but less than one-sixth of the total in the 1990s (see Bureau of the Census, 1993d: Table 708). Hence, if the original approach were used to develop the poverty thresholds today, their value would be significantly higher. One may question whether a poverty threshold should be updated for

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changes in total consumption, which includes spending on luxuries as well as necessities. One may also question whether a poverty threshold should remain fixed in real terms, so that it progressively declines in relation to the standard of living, not only overall but for such necessities as food and housing.

## **ALTERNATIVE POVERTY MEASURES AND CRITERIA FOR A MEASURE**

In this section we first consider different approaches to constructing poverty thresholds. We then consider the definition of family resources, which is the other side of the calculation needed to determine if a given person or family is poor. Establishing a poverty measure also requires that several other issues be addressed, particularly the time period, the unit of analysis, and how information about those in poverty is presented; these are treated below (see "Other Issues in Poverty Measurement"). Last, we present three criteria that we believe are critical in assessing any measure of poverty for consideration as the official U.S. measure.

### **Types of Poverty Thresholds**

#### **Absolute and Relative Thresholds**

The literature often distinguishes between "absolute" and "relative" poverty thresholds. Absolute thresholds are fixed at a point in time and updated solely for price changes; relative thresholds are updated regularly (usually annually) for changes in real consumption. In this sense, the U.S. measure is an absolute one.

Absolute thresholds generally carry the connotation that they are developed by "experts" with reference to basic physiological needs (e.g., nutritional needs). In contrast, relative thresholds, as commonly defined, are developed by reference to the actual expenditures (or income) of the population. A typical approach is to select a cutoff point in the distribution of total family expenditures or income adjusted for family composition—say, one-half the median—and designate that dollar amount as the poverty threshold for a reference family, with thresholds for other family types developed by use of an equivalence scale. The European Community often uses relative thresholds to facilitate cross-national comparisons (see, e.g., O'Higgins and Jenkins, 1990).<sup>7</sup>

One criticism of relative thresholds is that the choice of the expenditure or income cutoff is arbitrary or subjective, rather than reflecting an objective

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<sup>7</sup> Most developed countries do not have official poverty measures (see Will, 1986). However, studies of poverty have been carried out in most countries using various measures developed by researchers or social welfare policy analysts.

standard of economic deprivation. It is also argued that relative poverty thresholds do not provide a stable target against which to measure the effects of government programs because they change each year in response to increases or decreases in real consumption levels instead of remaining fixed in real terms. However, it is important to stress that relative poverty thresholds are not so distinct as one might imagine from thresholds developed according to expert standards of need: the latter also embody a great deal of relativity and subjectivity (see below). Moreover, it is rare for expert (or other) standards to be maintained in absolute terms over long periods of time. The more common experience is that an old standard is replaced after some period of time by a new standard that is higher in real terms (in this regard, see Fisher, 1993, for the history of unofficial poverty budgets in the United States prior to Orshansky). In other words, updating for real growth in consumption occurs, but at occasional intervals rather than on a regular basis.

### **Expert Budgets: The U.S. Experience**

Expert budgets typically involve the development of standards for a large number of goods and services (e.g., food, clothing, shelter, utilities, transportation, personal care) with perhaps a small "other" or "miscellaneous" category. Although not an expert budget in this sense, the original U.S. poverty thresholds were based on expert standards for a key commodity, food. The experts were USDA home economists, and the poverty budget developed by Orshansky at SSA was based on the USDA estimates of the cost of the Economy Food Plan with a multiplier to account for other consumption items.

Relativity and subjectivity entered into the determination of both the food component and the multiplier for the original poverty thresholds. The Economy Food Plan was developed by considering the food-buying patterns of lower income families, as well as nutritional requirements. The USDA experts could have developed the Economy Food Plan at an even lower cost level and still provided for nutritional balance if they had been willing to ignore the eating patterns of Americans, who, even at lower income levels, showed a preference for meat as well as rice and beans. They could also have developed the Economy Food Plan at a higher cost level to allow for somewhat greater variety of diet and an occasional restaurant meal. That is, they had to make judgements that cannot be supported by nutritional science alone; they were guided in these judgements by data on Americans' actual food choices. Orshansky then explicitly introduced another element of relativity into the thresholds by choosing to use a multiplier that was based on the spending patterns of the average American family rather than on expert standards for other needed budget items.

Subjective judgement and relativity cannot be avoided by developing a detailed budget that eschews the use of a multiplier. The Family Budgets



Program of the BLS is a case in point. For the mid-1940s, 1959, and 1966, BLS developed detailed budgets for particular family types at an "intermediate" standard of living (earlier termed a "modest but adequate" or "moderate" standard). For 1967, BLS developed "higher" and "lower" budgets by scaling the intermediate budget up and down. In time intervals between budget revisions, the budgets were updated by repricing the budget, or, after 1966, by adjusting its cost by the change in the CPI.<sup>8</sup>

To develop the budgets, BLS used expert standards when they existed, including the USDA food plans (for the at home component of food) and housing standards developed by the predecessors to the U.S. Department of Housing and Urban Development (HUD). For other budget items (e.g., clothing, transportation), BLS analysts used econometric methods to determine the spending levels that demarcated "necessary" from "excess" spending. These methods proved quite problematic in concept and application: they often produced unclear results, which, just as for the expert standards, necessitated choices that could only be guided by considering actual spending preferences (see Expert Committee on Family Budget Revisions, 1980). Overall, on each occasion when BLS revised its family budgets, the baseline intermediate-level budget typically approximated median spending levels of American families at the time. In other words, the budget reflected changes in the standard of living, but on a periodic basis rather than every year as would occur with a conventional relative measure.

Poverty standards developed by experts have historically been conditioned by their time and place. Thus, the modern Economy Food Plan and its successor, the Thrifty Food Plan, are much more generous in terms of allowed quantities than the food components of minimum budgets that were developed in major American cities between 1906 and 1929; similarly, the implicit allowance for nonfood items in the original SSA poverty thresholds is considerably more generous than the allowance in the pre-1929 budgets, when incomes were lower and the percentage spent on food was, consequently, higher (Appelbaum, 1977).

Although budget-based poverty thresholds are essentially relative in their development, and hence not as different as one might suppose from thresholds that are explicitly relative, they do have some distinctive features. By incorporating one or more explicitly named commodities, budget-based thresholds convey some type of paternalistic or normative concept of "needs," which may be more appealing to policy makers and the general public than a purely relative concept, such as one-half median family income. Of course, people will argue about which commodities should be part of the budget and which should be left out: obtaining consensus may be easier to the extent that broad

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<sup>8</sup> The BLS Family Budgets Program was discontinued in the early 1980s for lack of adequate funds to improve it.

budget categories are used (e.g., clothing) rather than specific budget items (e.g., a raincoat). There still remains the problem of setting the specific dollar value for each named commodity and for the multiplier (if there is one) and determining how (and how often) to update those values: most expert budgets rely heavily on people's actual spending patterns.

### Other Approaches

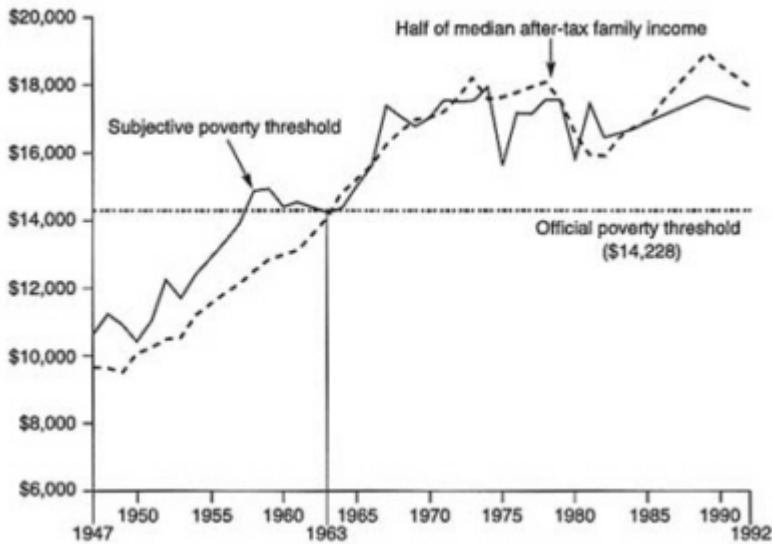
There are still other ways of determining poverty thresholds. One approach, which has been the subject of considerable research, particularly in Europe, is to ask a representative sample of the population to specify a minimum necessary income or to evaluate the adequacy of various income levels. There are various methods to calculate these "subjective" poverty thresholds from survey data of this type, each of which has positive and negative features. Generally, subjective poverty thresholds are sensitive to question wording and the particular method used in their derivation. Also, there tends to be wide variation in respondents' answers.

Despite their problems, subjective poverty thresholds—particularly a time series derived from consistent questions and procedures—can provide information that helps determine the extent to which other kinds of thresholds are more or less in agreement with broad public perceptions. One such series has been developed for the United States on the basis of responses to questions in the Gallup Poll over the period 1947-1989 (Vaughan, 1993), and there is similar information available from 1992 and 1993 polls.<sup>9</sup> This series suggests that people, on average, would have perceived about the same poverty level for a four-person family as the official threshold when it was first developed in the early 1960s. However, for the period prior to 1957, the data suggest that people, on average, would have perceived the poverty level in real terms to be below the official threshold. In contrast, since 1966, the data suggest that people, on average, would have perceived the poverty level to be higher than the official threshold.

Overall, there is a marked consistency from the late 1940s to the early 1990s between these subjective estimates of the poverty threshold and a time series of relative estimates based on median family income. For close to half a century these two quite distinct concepts have moved in similar ways and at similar levels. [Figure 1-1](#) shows the official poverty threshold for a two-adult/

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<sup>9</sup> The Gallup Poll asked: "What is the smallest amount of money a family of four (husband, wife and two children) needs each week to get along in this community?" In 1989 the Gallup Poll also included a question specifically about the poverty line. Vaughan (1993) used the relationship of the average amounts for the poverty and get-along questions in 1989 to construct a time series of subjective poverty thresholds from 1947 to 1989. A poverty line question in the 1992 Gallup Poll and the 1993 General Social Survey gave results similar to the 1989 Gallup Poll (see [Chapter 2](#)).



**FIGURE 1-1** Alternative poverty thresholds for four-person families, in constant 1992 dollars.

two-child family, the subjective estimate of that threshold based on Vaughan's (1993) work, and a relative estimate of that threshold, defined as one-half after-tax median income of four-person families. In 1963, the base year for the official poverty threshold, the subjective and relative estimates are in close agreement, which surely helps explain why the official threshold was so generally acceptable at that time.

Researchers abroad have proposed yet another method of establishing poverty standards, namely, identifying a list of specific activities, items of ownership, and types of consumption that are believed to be essential for people to be able to participate normally in their society. In the United Kingdom, Townsend (1979) developed a "deprivation index" that included 12 components, including such items as not having taken a vacation in the past year and having gone through one or more days in the past fortnight without a cooked meal. He used the scores on this index to attempt to determine income levels (poverty thresholds) below which the deprivation index scores rose markedly. Other researchers refined the Townsend index by including only those elements that at least one-half of the respondents to a national survey claimed to be "necessary" for a minimal standard of living in the United Kingdom and by asking those lacking a given item whether they lacked it because they could not afford it or because they did not want it

(Mack and Lansley, 1985). The resulting deprivation index was used directly as a measure of poverty: those experiencing "enforced lack" due to budget constraints of 3 or more of the 22 items in their list were deemed poor.<sup>10</sup>

A conceptual underpinning for a deprivation index approach has been proposed that posits a normative standard, in terms of a fixed set of needed capabilities—for example, the ability to obtain a job, literacy, good health (Sen, 1983, 1989, 1992; see also Atkinson, 1989). The standard is then made operational in a relative manner by determining items that are necessary to achieve these capabilities in a particular time and place: for example, it can be argued that one needs a telephone to be able to obtain a job in modern U.S. society.

Deprivation indexes have their advantages and disadvantages. Like poverty thresholds expressed in monetary terms, they, too, involve difficult questions of choice—How many and which items to include in the list?—and inevitably embody a large element of subjectivity and relativity. Deprivation indexes appear less useful than monetary thresholds as an official measure of poverty for such purposes as determining eligibility for government assistance, but they can broaden understanding of what it means to have less resources than the official thresholds.

### Definitions of Family Resources

Given a set of poverty thresholds, one must then define the resources that are to be counted to determine if each family and individual is above or below the appropriate threshold. Common resource definitions pertain to family income, which is the definition used in the United States and Canada, or to family expenditures (or consumption), which is the definition often used in Europe.

Conceptually, an income definition is more appropriate to the view that what matters is a family's *ability* to attain a living standard above the poverty level by means of its own resources. Thus, an income definition will not count as poor anyone who had an income above the threshold for the period of measurement, even if he or she consumed less than the poverty level, for whatever reason—pure choice or perhaps because of anticipating a drop in future income. Conversely, an income definition will count as poor anyone who had inadequate income, even if he or she was able to maintain consumption above the poverty level by such actions as borrowing, carrying a credit card balance, or depleting savings. In contrast to an income definition, an expenditure (or consumption) definition is more appropriate to the view that what matters is someone's *actual* standard of living, regardless of how it is

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<sup>10</sup> In the United States, Mayer and Jencks (1993) have looked at items of ownership and types of consumption as indicators of material more than social deprivation, analyzing the proportion of low-income people who do not own a home or a car, who do not have air conditioning, etc.

attained. In practice, the availability of high-quality data is often a prime determinant of whether an income- or expenditure-based family resource definition is used.

Whichever type of family resource definition is used, decisions must be made about its precise components. In the case of an income definition, one must decide whether to include or exclude taxes or in-kind income and whether to take account of expenses involved in earning income (e.g., commuting or child care expenses). One must also decide whether to include any value for asset holdings that could be used to provide cash income. For the definition of expenditures, one must decide which types of expenditures to include.

A basic principle for a poverty measure, but one that has not always been followed, is that the threshold concept and the family resource definition should be consistent. Relative measures, such as one-half median family income, achieve consistency because the thresholds are defined from the same data that are used to estimate resources. Other types of thresholds are typically defined on the basis of different data from those used to estimate resources. Hence, explicit attention must be paid to achieving consistency between the two components: for example, if child care expenses are treated as a deduction from income on the grounds that the money so spent is a cost of earning income and is not available for consumption, such expenses should not be part of the poverty-level budget. In general, income is used for consumption, savings, and taxes, and it does not make sense to base the threshold and family resource concepts on different components of these elements.

### **Criteria for a Poverty Measure**

Science alone cannot determine whether a person is or is not poor. Thus, there is no scientific basis on which one might unequivocally accept or reject a budget-based, or a purely relative, or a subjective concept for developing an official poverty measure. Each has some merit, and each has limitations; one concept may be more useful for one purpose and another for some other purpose. Although there are options that are clearly incorrect or internally inconsistent and there are better and worse ways of determining needs or resources, there is no way to reach a judgement solely on scientific grounds. Even if there were such a basis for an underlying concept, there is no purely scientific basis for specifying the level that should be defined as the threshold for poverty. This is at its essence a matter of judgement.

Given the limits of science, other criteria must be brought to bear in weighing alternatives and reaching decisions about an appropriate concept to underlie an official poverty indicator. We, as a panel that has deliberated about these matters at considerable length and benefited from the counsel of many experts, believe that three criteria are important in considering a concept

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and level for the official U.S. poverty measure, in addition to what can be learned from science: public acceptability; statistical defensibility; and operational feasibility. We have been guided by these three in our deliberations and in the formation of our recommendations.

### **Public Acceptability**

Public acceptability is both a demanding and a lenient criterion. One of the key reasons that the SSA measure of poverty became quickly and broadly acceptable as the "official" measure in the early 1960s was that there was, for whatever reason, broad consensus that a level of income of about \$3,000 was then a sensible cutoff for the threshold for poverty in the United States. A concept—then or now—that varies greatly from a generally accepted intuitive notion of what constitutes poverty would probably fail to gain political acceptance.

But this criterion demands that there be some rationale that has face validity. Just proclaiming a number—for example, the income level \$10,000 as the benchmark for poverty—is not useful and would not become influential as a benchmark or policy guide. There should be some underlying sense to the concept, some reasonable explanation that is persuasive. The measure should be understandable and broadly acceptable. The general public may not care to understand details about the calculation of components of the measure (e.g., the equivalence scale computations), but the basic notion that the poverty measure reflects should accord with common sense.

### **Statistical Defensibility**

Statistical defensibility, or statistical integrity, is an important criterion partly because the measure will be used by analysts and policy makers, and the technical details of its computation must meet the accepted standards of those analysts and of the many scholars who conduct research on the issue of poverty. Any newly proposed concept or method will be scrutinized and assessed before it becomes widely accepted, and it must withstand this demanding test.

The measure must be logically consistent. One of the central complaints against the current measure, as we note throughout this report, is that the poverty threshold is an after-tax concept, but the annual computation of the proportion and characteristics of people in poverty uses a before-tax family resource definition; this does not make sense.

More subtly, a poverty measure must allow for reasonable comparative analyses (within the limits of available data) across time, across places, across types of families, and across population groups. Analysts and policy makers want to be able to say something about the incidence of poverty compared

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with 10 years ago; about its incidence in the Northeast or Southwest; about its prevalence among minority groups, among female-headed families, among children, or among employed householders. The concept and measurement of poverty must apply as well to these various groups and over time and space as it does to the population as a whole for a given year.

### **Operational Feasibility**

Operational feasibility implies that data can be collected that will in fact measure the prevalence of the conditions underlying the concept of poverty. Income and expenditures are concepts that are generally understood and can be measured and so these should be the core of the concept and measure of poverty.

As the capacity to measure and to survey improves, the measures of poverty that are used may well also improve. One rationale for a new measure now is that, indeed, knowledge of and capacity to collect accurate data on income and expenditures is far superior to that which informed the construction of the poverty thresholds in the early 1960s. Another 30 (or fewer) years, one hopes, will again provide far superior data, theory, and technical capacity to gather and analyze relevant information.

## **A NEW APPROACH TO POVERTY MEASUREMENT: RECOMMENDATIONS**

### **A New Poverty Measure**

We conclude that it is time to revise the official U.S. measure of poverty, even though a revision will affect the time series of poverty statistics. This section presents our recommendations for a new poverty measure and its implementation. We describe and explain the type of measure that we propose with regard to the threshold for a reference family, the updating procedure, adjustments to the threshold for differing family circumstances, and the family resource definition. We then summarize the results of an empirical analysis of the likely effects of the proposed poverty measure on the distribution of poverty and the overall rate. Finally, we summarize our recommendations for the kinds of data that are needed to fully implement the recommended new measure and other issues in poverty measurement (e.g., the time period and economic unit).

**RECOMMENDATION 1.1. The official U.S. measure of poverty should be revised to reflect more nearly the circumstances of the nation's families and changes in them over time. The revised measure should comprise a set of poverty thresholds and a definition of**

family resources—for comparison with the thresholds to determine who is in or out of poverty—that are consistent with each other and otherwise statistically defensible. The concepts underlying both the thresholds and the definition of family resources should be broadly acceptable and understandable and operationally feasible.

**RECOMMENDATION 1.2.** On the basis of the criteria in Recommendation 1.1, the poverty measure should have the following characteristics:

- The poverty thresholds should represent a budget for food, clothing, shelter (including utilities), and a small additional amount to allow for other needs (e.g., household supplies, personal care, non-work-related transportation).
- A threshold for a reference family type should be developed using actual consumer expenditure data and updated annually to reflect changes in expenditures on food, clothing, and shelter over the previous 3 years.
- The reference family threshold should be adjusted to reflect the needs of different family types and to reflect geographic differences in housing costs.
- Family resources should be defined—consistent with the threshold concept—as the sum of money income from all sources together with the value of near-money benefits (e.g., food stamps) that are available to buy goods and services in the budget, minus expenses that cannot be used to buy these goods and services. Such expenses include income and payroll taxes, child care and other work-related expenses, child support payments to another household, and out-of-pocket medical care costs, including health insurance premiums.

Table 1-1 contrasts the elements of the proposed measure and the current measure. Not only do we propose a different concept for the reference family threshold (and suggest a realignment of the level of that threshold), but we also propose different ways of adjusting the threshold by family type, by geographic area, and over time, as well as a different definition of family resources. The current definition is gross money income; the proposed definition is disposable money and near-money income, which recognizes the value of near-money in-kind benefits and the unavailability for consumption of taxes and other nondiscretionary expenses. We also recommend using a different data source with which to measure disposable money and near-money income, namely, the Survey of Income and Program Participation (SIPP).

These other elements of a poverty measure—that is, the elements besides the concept and level of the threshold on which attention so often focuses—have important implications for differences in poverty rates for groups and areas and over time. In contrast to poverty statistics that are produced with the



TABLE 1-1 Elements of the Current and Proposed Poverty Measures

Element	Current Measure	Proposed Measure
Threshold Concept	Food times a large multiplier for all other expenses	Food, clothing, and shelter, plus a little more
1992 level (two-adult/two-child family)	\$14,228	Suggest within range of \$13,700-\$15,900
Updating method	Update 1963 level each year for price changes	Update each year by change in spending on food, clothing, and shelter over previous 3 years by two-adult/two-child families
Threshold Adjustments		
By family type	Separately developed thresholds by family type; lower thresholds for elderly singles and couples	Reference family threshold adjusted by use of equivalence scale, which assumes children need less than adults and economies of scale for larger families
By geographic area	No adjustments	Adjust for housing cost differences by region and size of metropolitan area
Family Resource Definition (to compare with threshold to determine poverty status)	Gross (before-tax) money income from all sources	Gross money income, plus value of near-money in-kind benefits (e.g., food stamps), minus income and payroll taxes and other nondiscretionary expenses (e.g., child care and other work-related expenses; child support payments to another household; out-of-pocket medical care expenses, including health insurance premiums)
Data Source (for estimating income)	March Current Population Survey	Survey of Income and Program Participation
Time Period of Measurement	Annual	Annual, supplemented by shorter term and longer term measures
Economic Unit of Analysis	Families and unrelated individuals	Families (including cohabiting couples) and unrelated individuals

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TABLE 1-2 Policy and Other Changes Affecting Poverty Statistics

Type of Change	Reflected in	
	Current Measure	Proposed Measure
Increase/decrease in federal or state income taxes	No	Yes
Increase/decrease in Social Security payroll taxes	No	Yes
Increase/decrease in Social Security benefits	Yes	Yes
Increase/decrease in receipt or benefits under Aid to Families with Dependent Children Program	Yes	Yes
Increase/decrease in food stamp receipt or benefits	No	Yes
Increase/decrease in public or private health insurance coverage	No	Yes
Increase/decrease in child care or commuting subsidies	No	Yes
Increase/decrease in child support awards and enforcement	Partly <sup>a</sup>	Yes
Economic recession/recovery	Yes	Yes

<sup>a</sup> Gross money income includes child support *received* by families, but does not deduct child support *paid* by families to other households.

current measure, the proposed measure will capture more fully the effects of government policy initiatives, as well as social and economic changes, on the disposable money and near-money income that different types of families have available to meet their basic needs; see [Table 1-2](#). We believe that the proposed poverty measure represents a marked improvement over the current measure, particularly for comparing the extent of poverty across population groups and geographic areas and across time.

### Periodic Reviews

The procedure we propose for updating the poverty thresholds should link them more closely to societal norms about the appropriate level for a poverty line. Our proposal is to update the thresholds for real changes in the consumption of food, clothing, and shelter (see below). In contrast, the current measure simply updates the thresholds for price changes. The proposed measure, thus, is a type of relative measure, but it is not the same as a fully relative measure, such as one-half median income or expenditures, that would update

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the thresholds for changes in total consumption, including luxuries as well as basic goods and services.

However, adopting the proposed updating procedure does not obviate the need for periodic reviews of the poverty measure to determine whether, conceptually, it remains useful and appropriate and to identify and effect improvements on the basis of new data collection or research knowledge. No measure is without flaws, and a continuing process of review and improvement is needed. Thus, we also recommend periodic reassessments of all aspects of the poverty measure to determine what further improvements could be made. Indeed, it is dismaying that such a process has not been followed for the current poverty measure.

Although we do not fully understand the reasons, it seems that the "official" standing of the U.S. measure and the fact that it is used to determine eligibility for a number of government assistance programs have made it almost impervious to change. Other statistical measures with equally great political and budgetary consequences, such as the CPI, are regularly reviewed and revised, but even obvious changes—such as defining income in after-tax terms once the Census Bureau had developed reasonably good procedures for estimating income and payroll taxes—have not been made to the poverty measure. Although maintaining a concept over time is desirable to facilitate analysis of trends, it is dangerous to let a key social indicator become so frozen in place that, when societal conditions change, it can no longer adequately reflect what it was designed to measure.

We believe it makes sense to conduct a comprehensive review of the poverty measure on a 10-year cycle, as is done with other important statistical indicators, such as the CPI. The review should address all aspects of the poverty measure, including the concepts underlying the thresholds and the family resource definition, the performance of the updating procedure, and whether better data are available with which to derive the thresholds and estimate resources.

Should changes to the measure result from one of these periodic reviews, it will be important for policy makers, researchers, and other users to understand the implications for the time series of poverty statistics. To facilitate the transition for users, two poverty rate series should be produced for a period of several years—the official series that is based on the new measure and a second series that is based on the old measure.

There is a question of who should implement the proposed revised poverty measure and carry out the 10-year reviews. The poverty measure, unlike the CPI or unemployment rate, does not have a clear "home" within the federal government. The Census Bureau publishes the official poverty statistics, but it has never been empowered to change the measure. The U.S. Office of Management and Budget (OMB) issued directives implementing the minor changes to the thresholds that were adopted in 1969 and 1981, but it

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has not played an active role in the debate about the underlying concepts and does not have research or operational capabilities.

Based on past practice, it seems likely that the Statistical Policy Office of OMB will convene an interagency group representing program and statistical agencies to review this report and determine the response to our recommendations. On the assumption that OMB will play this role, we believe the Statistical Policy Office is the appropriate office to oversee implementation of our recommendations if they are accepted and to manage the 10-year review process. Obviously, the Census Bureau will have a major role to play, not only in publishing statistics under the new measure, but also in implementing needed data improvements and conducting research on various aspects of the measure. The Bureau of Labor Statistics will also have an important role in light of our recommendations for deriving and updating the reference family poverty threshold from consumer expenditure data (see below). Other agencies can also make important contributions to the continued improvement of the measure, as can researchers at academic institutions. In this regard, we urge OMB to seek the involvement of all appropriate agencies in the implementation and continued improvement of the poverty measure.

**RECOMMENDATION 1.3. The U.S. Office of Management and Budget should adopt a revised poverty measure as the official measure for use by the federal government. Appropriate agencies, including the Bureau of the Census and the Bureau of Labor Statistics, should collaborate to produce the new thresholds each year and to implement the revised definition of family resources.**

**RECOMMENDATION 1.4. The Statistical Policy Office of the U.S. Office of Management and Budget should institute a regular review, on a 10-year cycle, of all aspects of the poverty measure: reassessing the procedure for updating the thresholds, the family resource definition, etc. When changes to the measure are implemented on the basis of such a review, concurrent poverty statistics series should be run under both the old and the new measures to facilitate the transition.**

### The Poverty Threshold

To understand fully the concept we recommend for developing and updating the poverty threshold and why we recommend it, the reader should keep several things in mind. First, the proposed threshold concept applies to a reference family, which we recommend be a family of two adults and two children.<sup>11</sup> It is possible with some concepts to develop thresholds independently

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<sup>11</sup> It is important for technical reasons relating to the equivalence scale for the reference family to fall in the middle of the size distribution. Of course, the four-person family is not the

for each family type (as the official thresholds were originally constructed). However, we believe that it makes more sense to develop a threshold for a reference family and then use a formal equivalence scale to adjust that threshold for different numbers of adults and children. We also recommend that the thresholds be further adjusted by an index of differences in the cost of housing across geographic areas as a feasible way of implementing a cost-of-living adjustment (see below).

Second, we believe that in addition to accounting for different needs of families by number of adults and children and geographic area of residence, it is critical to account for different needs due to the fact that some families incur nondiscretionary expenses that are not available for consumption. For example, some families pay for child care in order to earn income, whereas other families (and individuals) make no such payments, yet the official thresholds are the same for both situations. One way to recognize these different circumstances is to develop additional thresholds, such as thresholds for nonworking families, working families with children who pay for child care, and other working families. We recommend instead that nondiscretionary expenses—which we define as taxes, child care and other work-related expenses, child support payments to another household, and out-of-pocket medical care expenditures (including health insurance premiums)—be deducted from the income of families with such expenses. This approach will more accurately capture the poverty status of families in different circumstances than would the approach of trying to develop a range of different thresholds. However, our approach has implications for comparing poverty thresholds across concepts: a reference family threshold developed as we propose will necessarily exclude some expenses that are typically averaged in for all such families.

Third, we consider that the decision about whether (and to what extent) to update the official poverty line for real growth in consumption has important implications for the choice of a poverty threshold concept and, indeed, for how much attention one needs to give to the threshold concept as opposed to other aspects of the poverty measure. We briefly discuss the updating issue before turning to our recommended threshold concept.

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predominant living arrangement in American society. Of all households (including family households and those headed by unrelated individuals), the single largest type consists of adults living alone (25% in 1992), followed by married couples with no other family member (22%). Four-person families, comprising a married couple and two other family members, are the next largest group (13%). However, such four-person families are the modal type in terms of how many people they represent: in 1992, they accounted for 20 percent of all people, compared with 17 percent for married couples living alone, and 10 percent for single-adult households (Rawlings, 1993: Table 16).

## Updating the Thresholds

Although developed in a largely relative fashion with reference to actual spending patterns, the official U.S. poverty thresholds are absolute in that they are updated each year solely for price changes. If one believes it appropriate to continue to maintain the current official poverty standard in absolute terms, then there is little need to debate the underlying threshold concept. One would want to review other aspects of the measure, including adjustments to the threshold for different family circumstances and the family resource definition. One would also want to consider the appropriate price index for updating: some have argued, for example, that it is preferable to use an index based on a market basket that reflects the spending patterns of low-income people rather than the overall CPI. But it would not be necessary to reconsider the level or concept of the reference family threshold itself.

(We note that whatever the merits of continuing with an absolute poverty standard, the argument that is sometimes made for it—namely, that only with an absolute standard is it possible to reduce poverty—is incorrect. In fact, the only way in which the poverty rate cannot go down is if the poverty level is defined each year as that income value not exceeded by, say, the lowest 20% of families—by definition, 20% of families are always below that level. In contrast, with such relative concepts as one-half median family income, changes in the distribution of income below the median can lower the poverty rate even when median income—and hence the dollar value of the poverty threshold—rises in real terms.)

An alternative approach would be to conclude from the historical evidence—as we do—that poverty thresholds, when they are set, are inherently relative to time and place but argue that it is important to maintain a set of thresholds, once chosen, in absolute terms for reasonably long periods of time. This approach would reject the notion of maintaining a poverty level unchanged for longer than, say, a generation (or, perhaps, a decade), but, between realignments, would maintain a stable target in real terms for such purposes as evaluating the effects of economic growth and government assistance programs on the extent of poverty.

The question then becomes whether now is the time for a realignment of the official thresholds and, if so, what is a reasonable level to adopt. (Other aspects of the poverty measure, such as the adjustments to the reference family threshold and the family resource definition, would also need to be considered, as would the appropriate price index for updating.)

A pragmatic first step is to look at the reference family threshold level produced by several concepts (e.g., the original SSA concept, other budget approaches, one-half median income or expenditures, subjective survey responses) in comparison with the official threshold. To the extent that the various levels from other concepts both differ from the official threshold and

are reasonably congruent with each other, it may be possible to reach a consensus as to an appropriate realignment—just as the original SSA threshold for a family with two adults and two children commanded broad support in 1963.

It turns out that recently calculated thresholds for a two-adult/two-child family (or, in some cases, a four-person family) range from \$17,200 to \$21,800 (in 1992 dollars); see [Table 1-3](#). By comparison, the official 1992 two-adult/two-child threshold is \$14,228. (All the thresholds in [Table 1-3](#) are after-taxes; however, they average the needs of families with and without other types of

TABLE 1-3 Poverty Thresholds for Two-Adult/Two-Child (or Four-Person) Families Set by Various Methods for 1989-1993, in 1992 Dollars (Rounded)

Type and Source of Threshold	Amount
Absolute Threshold	
Official Orshansky, 1963: Economy Food Plan times 3.0, updated by the change in the CPI	14,228
Expert Budget Thresholds	
Adaptation by the panel of Orshansky (1963, 1965a): food times a multiplier of 4.4	20,700
Adaptation by the panel of Ruggles (1990): housing times a multiplier of 3.3	21,600
Weinberg and Lamas (1993), version A: food plus housing times a multiplier of 2.0	20,300
Weinberg and Lamas (1993), version B: (food plus a higher housing standard times a multiplier of 2.0	21,800
Adaptation by the panel of Renwick and Bergmann (1993): budget for food, housing and household operations, transportation, health care, clothing, child care, and personal care	17,600
Schwarz and Volgy (1992): detailed budget for single-earner family	19,000
Relative Thresholds	
One-half median after-tax four-person family income: extension of series developed by Vaughan (1993)	18,000
Adaptation by the panel of Expert Committee on Family Budget Revisions (1980): one-half average expenditures of four-person consumer units	20,000
Subjective Thresholds	
1989 Gallup Poll "poverty" line: from Vaughn (1993)	17,700
1993 General Social Survey "poverty" line	17,200

SOURCE: See [Chapter 2](#), especially [Table 2-5](#).

NOTE: All thresholds are after-taxes except that survey respondents to the Gallup Poll and General Social Survey may not have answered the question on the poverty line in after-tax terms.

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nondiscretionary expenses, such as child care.) These numbers indicate both that it would be appropriate to revise the level of the official thresholds and that there is room for debate about the extent of the realignment. For that debate, it would be important to consider the comparative merits of different concepts and the quality of the data underlying them, for two reasons: first, in order to reach consensus on a new reference family poverty threshold, and, second, to recommend improvements to the data and methods for various concepts so as to provide a sounder basis for repeating the realignment in the future.

There is yet a third alternative: an automatic mechanism for updating the thresholds on an annual basis for real changes in living standards. (The question of the price index is then irrelevant, except to account for lags in data availability.) In our view, this approach has several advantages over the approach of realigning the thresholds every so often. First, it avoids major breaks in the time series of poverty statistics that will inevitably occur with periodic realignments. Second, it ensures that an adjustment is in fact carried out and is not delayed or negated for political or other considerations. Third, it obviates the controversy that is likely to occur with periodic readjustments.

With a decision to update the poverty thresholds annually for changes in living standards, it becomes quite important to look at alternative concepts. Each of the concepts we reviewed, in our view, can contribute to the process of reaching consensus on a new threshold with which to initiate a new time series of poverty statistics. However, each concept has somewhat different implications for updating the poverty thresholds, particularly for the extent of the updating—that is, whether the thresholds are updated for real changes in all consumption or only in basic consumption. We believe it will be more acceptable to update the poverty thresholds in a "conservative" manner, that is, to update them for growth in consumption of basic goods and services that pertain to a notion of poverty, rather than to update them for growth in consumption of all goods and services.

### **Threshold Concepts: Assessment**

Having reviewed the many possible concepts for deriving and updating the official reference family threshold in light of our criteria (see above), we acknowledge the strong attraction of the original SSA concept in terms of public acceptability and understandability. After all, food—more precisely, what is deemed a "minimally adequate" diet—is undeniably a necessary item of consumption. And developing a threshold that is food times a multiplier to allow for such other economic necessities as housing is a simple concept to understand. Also, the concept is easy to implement with available consumer expenditure data.

However, we question the use of expert-based standards of need even for



an item, such as food, that seems relatively well grounded in human physiology. It may be feasible for experts to develop "minimum" standards for food on the basis of nutrition needs alone, but because tastiness and some variety are part of the notion of a minimally adequate diet, even experts will rely on actual consumption patterns and not just nutritional need. In this way, judgement inevitably enters any calculation. We believe it best if these judgements are introduced and explained explicitly.

Even more we question the use of a large multiplier applied to a single commodity, particularly a multiplier that reflects the total expenditures of the average family. With this approach, if applied regularly, the thresholds will be updated to reflect increased spending on most goods and services, not just basic goods and services. In other words, it is more akin to a completely relative concept, like one-half median family income or expenditures (see [Table 1-3](#)).

An expert budget approach in which standards are set for a number of goods and services, with perhaps only a small "other" or "miscellaneous" category, avoids the problem of a large multiplier. However, this approach necessitates making a large number of specific judgements about approved expenditures for the poor, each of which must be reexamined for updating purposes. It is true that any approach involves judgements, and the poverty thresholds that result from expert budgets may prove no less acceptable than other thresholds (just as the original SSA thresholds found wide acceptability). However, we believe it best for deriving the official U.S. poverty thresholds to minimize the number of judgements required and, further, to link the thresholds directly, rather than indirectly, to actual spending patterns.

A relative concept for the reference family poverty threshold, such as one-half the median level of family income or expenditures (adjusted for family composition), makes explicit the judgement that is involved in setting a poverty level. Although one-half the median is the commonly used standard, it could just as well be some other percentage of median income. Also, as usually implemented, a relative concept provides for an automatic, regular updating of the poverty thresholds for real changes in living standards, as new data on income or expenditures become available.

In spite of these attractive characteristics, we believe that a completely relative concept would find little public support. First, it makes no reference at all to a budget and, hence, gives no sense of what a poverty standard entails, except that it is some fraction of median income or expenditures. Second, a relative concept, applied regularly, will update the poverty thresholds for real changes in total consumption, including luxuries as well as necessities. Moreover, the thresholds will reflect short-term changes in the business cycle—both up and down—as well as longer term changes. In an economic down-turn, the thresholds will likely decline in real terms, with the possibly counterintuitive result that the poverty rate falls as well. It certainly seems

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plausible that, if there is a serious depression or even a long-running recession, people will change their views about an appropriate poverty threshold, setting it at a lower dollar figure than previously. Also, a decline in the threshold does not necessarily mean a lower proportion of people in poverty (nor does an increase in the threshold necessarily mean a higher proportion of people in poverty). However, it seems undesirable to have the thresholds fluctuate with yearly ups and downs in the business cycle.

From the perspective of public acceptability and also from the view that the poverty level is inherently relative to a particular society, one could argue for using the responses of a representative sample of the population to set the level. In support of this approach, evidence from the Gallup Poll series and other studies show that subjective poverty thresholds tend to track changes in living standards, although on a less than one-to-one basis (i.e., they tend to change in a quasi-relative fashion). However, we believe that methodological problems—such as sensitivity of the results to question wording, large variance in responses—make this approach unsuitable for determining the official U.S. poverty thresholds. There is also the possibility with a public opinion survey that the results could be biased if people realize that their answers could affect the poverty line and thus respond differently than they otherwise would.

### **Recommended Threshold Concept and Updating**

We propose that a new poverty threshold for the United States be developed as a hybrid of the budget-based and relative approaches. In our view, the poverty-level budget should start with a dollar amount for the sum of three broad categories of necessary goods—food, clothing, and shelter (including utilities). This sum should then be increased by a modest additional amount to allow for other necessary expenditures, such as personal care, household supplies, non-work-related transportation. We selected food, clothing, and shelter because they represent basic living needs with which no one would quarrel. That is, people may quarrel about the need for specific kinds of food, housing, and clothing—such as whether air conditioning is essential—but not about the need for food, housing, and clothing in broad terms. Indeed, the United States has major assistance programs to provide food and housing; there is no clothing program, but clothing allowances historically were separately identified grants under Aid to Families with Dependent Children (AFDC). There are other needs besides these three, of course, but there will be debate about which other goods and services represent necessities (e.g., whether to include reading materials). We believe that the use of a multiplier is a better way to provide an allowance for other needs without having to designate particular goods and services as necessary or unnecessary.

A difference in our approach is that we propose to obtain dollar amounts for the budget categories directly from tabulations of actual expenditures,

rather than from expert judgements about standards of need. Specifically, we recommend that a new poverty threshold for the reference family be derived by specifying a percentage of median expenditures on the sum of food, clothing, and shelter by two-adult/two-child families in the Consumer Expenditure Survey (CEX), and applying a multiplier to that dollar value so as to add a small amount for other needed expenditures. (CEX data can also inform the selection of the multiplier.)

Having specified a percentage of the median and a multiplier, these values would then be used to update the poverty threshold for the reference family each year on the basis of more recent CEX data. To smooth out year-to-year fluctuations and to lag the adjustment to some extent, we propose to perform the calculations for each year by averaging the most recent 3 years' worth of CEX data, with the data for each of those years brought forward to the current period by using the change in the CPI. Once the threshold is updated for the reference family, the thresholds for other family types can be calculated (see below).

An important advantage of our proposed threshold concept is its implications for updating over time. Historically, spending on food, clothing, and shelter has increased at a slower rate in real terms than has total spending. We have estimated the elasticity with respect to real total expenditures of real spending on food, clothing, and shelter (including utilities) for the period 1960-1991 at about 0.65: in other words, for each 1 percent increase in real expenditures for all items, we estimate that expenditures on food, clothing, and shelter increased by about two-thirds of 1 percent (see Council of Economic Advisers, 1992: Table B-12). Hence, tying the poverty thresholds to spending levels for these three necessary commodities is a conservative way of updating; it adjusts the thresholds for real increases in consumption of basic goods and services, rather than for all goods and services.<sup>12</sup> Supporting the reasonableness of this degree of updating is the evidence that subjective poverty thresholds have an elasticity in the range of 0.65-0.80 with respect to median income: when people are asked in successive years to set a value for a minimum income, their answers reflect changes in living standards but on less than a one-for-one basis (see Figure 1-1).

**RECOMMENDATION 2.1. A poverty threshold with which to initiate a new series of official U.S. poverty statistics should be derived from**

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<sup>12</sup> One could argue that a completely relative updating procedure is preferable to a "conservative" procedure on the grounds that, over time, "luxuries" become "necessities" (e.g., as in the case of radios and televisions). However, we argue that it is appropriate for a *poverty* measure to reflect such changes with a lag. An example is modern-day computing technology. Our proposed updating procedure will not immediately reflect the spread of such technology to consumers; however, when the technology becomes so integrated into the American lifestyle that housing and utilities are reconfigured to accommodate it, our measure will likely pick up that change.

**Consumer Expenditure Survey data for a reference family of four persons (two adults and two children). The procedure should be to specify a percentage of median annual expenditures for such families on the sum of three basic goods and services—food, clothing, and shelter (including utilities)—and apply a specified multiplier to the corresponding dollar level so as to add a small amount for other needs.**

**RECOMMENDATION 2.2. The new poverty threshold should be updated each year to reflect changes in consumption of the basic goods and services contained in the poverty budget: determine the dollar value that represents the designated percentage of the median level of expenditures on the sum of food, clothing, and shelter for two-adult/two-child families and apply the designated multiplier. To smooth out year-to-year fluctuations and to lag the adjustment to some extent, perform the calculations for each year by averaging the most recent 3 years' worth of data from the Consumer Expenditure Survey, with the data for each of those years brought forward to the current period by using the change in the Consumer Price Index.**

A concern with an updating procedure that adjusts for real increases in consumption is that the poverty thresholds will be too closely tied to changes in the business cycle. Our proposed updating procedure should moderate such fluctuations, both because of the use of 3 years' worth of expenditure data to calculate the reference family threshold each year and because the updating is tied to the basic necessities of food, clothing, and shelter.

The lack of a consistent historical time series of CEX data limited our ability to assess the performance of our updating procedure over the past 30 years. With data available beginning in 1980, however, we were able to determine that our procedure is less sensitive to the business cycle than a completely relative updating procedure (e.g., one-half median income or expenditures). Also, our procedure in fact performed conservatively over this period, in that the thresholds increased in real terms but not as much as thresholds derived in a completely relative manner (see [Chapter 2](#)).

Nonetheless, for evaluation purposes, we believe it would be useful to produce a second set of poverty rates from the proposed measure in which the thresholds are updated only for price changes. This second set of rates will permit evaluating changes in the official rates, based on updating the thresholds according to our recommended procedure, relative to changes in the business cycle.

**RECOMMENDATION 2.3. When the new poverty threshold concept is first implemented and for several years thereafter, the Census Bureau should produce a second set of poverty rates for evaluation**

**purposes by using the new thresholds updated only for price changes (rather than for changes in consumption of the basic goods and services in the poverty budget).**

In summary, we see the following advantages to our proposed concept for the poverty threshold. First, the concept is readily described as "food, clothing, and shelter, plus a little more." Although it is an oversimplification, as is a description of the original official concept as "food times a multiplier," it represents a clear and understandable level of need. Second, by relying on observed expenditure data, the concept avoids the difficulties of trying to develop and justify expert-based standards for a number of budget categories. Our approach explicitly links the measure of poverty to actual expenditures on basic goods and services. Finally, our proposed updating procedure has properties that we believe are desirable for the official U.S. poverty measure—namely, that the thresholds be updated on an automatic, regular basis, and that the updating be linked to spending on basic goods and services instead of total consumption.

### **Setting the Initial Threshold**

In our empirical analysis (see below), we determined a two-adult/two-child reference family poverty threshold that, together with all of the other changes we recommend to the thresholds and family resource definition, produced the same overall poverty rate as the official rate for 1992. The purpose of this exercise was to illustrate the effects of the proposed measure, compared with the current measure, on the distribution of poverty among population groups and areas of the country.

The threshold for this exercise, however, is simply an artifact of the analysis. Thus, there remains the question of where to set the reference family threshold to serve as the starting point for a new series of poverty statistics with a new measure. Since we propose a new concept for the threshold, in which work and certain other expenses are subtracted from income rather than included in the poverty budget, one must allow for that concept in considering values for the reference family threshold. Data limitations make it difficult to convert threshold values developed on the basis of other concepts to the proposed concept with any exactitude, but it is possible to make rough estimates. Thus, a rough estimate is that the official 1992 threshold of \$14,228 for a two-adult/two-child family is about \$12,000 in terms of the proposed concept; see [Table 1-4](#).<sup>13</sup> This adjustment only transforms the one budget concept

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<sup>13</sup> The value of \$12,000 is lower than the value of \$13,175 that, together with the proposed changes to the poverty measure, produces the same overall poverty rate as the official rate for 1992 (see section below on "Effects"). The reason is that the threshold value for this exercise has to exactly offset the effects of all the other changes, not just the new threshold concept.

**TABLE 1-4** Poverty Thresholds for Two-Adult/Two-Child (or Four-Person) Families Set by Various Methods for 1989-1993, as Developed and as Converted, in 1992 Dollars (Rounded)

Type and Source of Threshold	Amount as Developed	Amount as Converted <sup>a</sup>
<b>Absolute Threshold</b>		
Official Orshansky, 1963: Economy Food Plan times 3.0 updated by the change in the CPI	14,228	12,000
<b>Expert Budget Thresholds</b>		
Adaptation by the panel of Orshansky (1963, 1965a): food times 4.4	20,700	17,400
Adaptation by the panel of Ruggles (1990): housing times 3.3	21,600	18,100
Weinberg and Lamas (1993), version A: food plus housing times 2.0	20,300	17,100
Weinberg and Lamas (1993), version B: food plus a somewhat higher housing standard times 2.0	21,800	18,300
Adaptation by the panel of Renwick and Bergmann (1993): budget for food, housing and household operations, transportation, health care, clothing, child care, and personal care	17,600	13,100
Schwarz and Volgy (1992): detailed budget for single-earner family	19,000	15,600
<b>Relative Thresholds</b>		
One-half median after-tax income for four-person families: extension of series developed by Vaughan (1993)	18,000	15,100
Adaptation by the panel of Expert Committee on Family Budget Revisions (1980): one-half average expenditures of four-person consumer units	20,000	16,800
<b>Subjective Thresholds</b>		
Gallup Poll "poverty" line: from Vaughan (1993)	17,700	14,900
General Social Survey "poverty" line	17,200	14,400
<b>Suggested Threshold Range</b>		
Recommended concept developed by panel: percentage of median expenditures on food, clothing, and shelter, plus a little more	13,700– 15,900	13,700– 15,900

NOTE: All thresholds are after taxes (except that survey respondents to the Gallup Poll and General Social Survey may not have answered the question on the poverty line in after-tax terms). See Chapter 2 (especially Table 2-5) for more information on each threshold.

<sup>a</sup>"As converted" amounts for Renwick and Bergmann and Schwarz and Volgy are from inspection of their budgets, which gives ratios of "as converted" to "as developed" amounts of 0.74 and 0.82, respectively. These ratios are low because the budgets assume that every family spends the maximum allowance for such items as work expenses. "As converted" amounts for other thresholds are based on a ratio of 0.84, which is the ratio of "as converted" and "as developed" amounts for one-half median after-tax income of two-adult/two-child families. The "as converted" amount was obtained by subtracting one-half average work-related, child care, and out-of-pocket-medical care expenditures as imputed by the panel to the March 1993 CPS for two-adult/two-child families with after-tax income around the median.

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into the other; we believe that the adoption of a new measure should also occasion a reevaluation of the appropriate level of the threshold.

We have recommended that, once adopted, the new reference family threshold be updated on an annual basis for real growth in the consumption of three categories of basic goods and services—food, clothing, and shelter. Consistent with this recommendation, we conclude that it is appropriate in setting the initial threshold to consider the real growth in the standard of living since 1963 when the current threshold was fixed in real terms.

**RECOMMENDATION 2.4.** As part of implementing a new official U.S. poverty measure, the current threshold level for the reference family of two adults and two children (\$14,228 in 1992 dollars) should be reevaluated and a new threshold level established with which to initiate a new series of poverty statistics. That reevaluation should take account of both the new threshold concept and the real growth in consumption that has occurred since the official threshold was first set 30 years ago.

Over the period 1963-1992, median before-tax money income of four-person families increased by 36 percent in real terms (the real increase in median after-tax income was 28%; the real increase in average expenditures was 45%; see [Chapter 2](#)), but the poverty threshold did not change. There is, of course, a judgement to be made about how much to adjust the current poverty threshold. An adjustment that is somewhat less than the real increase in total consumption would be consistent with the proposed updating procedure, given our earlier observation that real growth in spending on food, clothing, and shelter has been less than real growth in total spending.

Because of the limitations of historical data on family expenditure patterns, one cannot readily apply the proposed updating procedure over time to determine a value for the threshold today (see [Chapter 2](#)). Even if the data were adequate for this purpose, however, the decision about the appropriate level for the reference family threshold for a particular time and place would remain inherently a matter of judgement.

For this reason, we concluded that we would not make a formal recommendation about the initial threshold for the two-adult/two-child reference family. However, we do offer our conclusion about what we believe is a reasonable range for that initial threshold. This conclusion is informed by our analysis of thresholds that result from a variety of approaches and concepts in the published literature, as well as our judgement.

We conclude that reasonable values for the starting threshold for a two-adult/two-child family lie in the range of about \$13,700 to \$15,900 (in 1992 dollars). Compared with the range of threshold values of \$17,200 to \$21,800 shown in [Table 1-3](#), the values we suggest appear to represent little or no updating in real terms of the official 1992 threshold of \$14,228 for a two-

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adult/two-child family. However, when other threshold values are converted (as best as can be done) to *our budget concept*, their range is \$13,100 to \$18,300, or 9 to 53 percent above the comparable value of \$12,000 for the official level; see [Table 1-4](#). Our suggested range of \$13,700 to \$15,900 is 14 to 33 percent higher than the comparable current level. This range falls within but toward the lower end of the estimated range of other thresholds. Thus, it represents a conservative updating in real terms of the current threshold, consistent with our recommendation.

In terms of our proposed budget concept, the lower end of our suggested range, \$13,700, equals 1.15 times (or 15% more than) the spending on food, clothing, and shelter by two-adult/two-child families at the 30th percentile of the distribution estimated from the 1989-1991 CEX (expressed in 1992 dollars). That is, if one sets aside 15 percent for all other spending items, then that threshold level permits a family to spend as much on food, clothing, and shelter as families that ranked at the 30th percentile of all two-adult/two-child families, which was \$11,950. Similarly, one can characterize the upper end of our suggested range, \$15,900, as equal to 1.25 times (or 25% more than) the spending on food, clothing, and shelter by two-adult/two-child families at the 35th percentile of the distribution, which was \$12,720.<sup>14</sup>

What could these amounts buy? Illustratively, a family at the 30th percentile might spend \$355 per month or \$4,260 annually for food (the value of the Thrifty Food Plan for a four-person family); \$545 per month or about \$6,550 per year for rent and utilities (including telephone) for a two-bedroom apartment (the fair market rent in 1992 for such units that is the basis for federal housing assistance); and \$95 per month (\$24 per family member) or \$1,140 per year for clothing. A family at the 35th percentile could spend another \$64 per month, or \$770 per year, on food, clothing, and shelter. The multiplier adds another \$1,750-\$3,180, or about \$145-\$265 per month, for all other needed expenditures.

Values of the multiplier of 1.15 to 1.25 are below the values of the multiplier in other approaches (see [Table 1-4](#)). However, the multiplier in the proposed concept applies to a larger bundle of basic goods and services (food, clothing, and shelter) than is true for other approaches; also, it excludes such expenses as child care and out-of-pocket medical care costs, which are treated as deductions from income.

Analysis that we conducted with CEX data supports the range for the multiplier of 1.15 to 1.25. (In this analysis, we examined the amounts spent on such items as personal care and non-work-related transportation relative to the amounts spent on food, clothing, and shelter by two-adult/two-child

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<sup>14</sup> Both the lower and the upper ends of our suggested range for the initial reference family threshold could be expressed in terms of some other combination of values for food, clothing, and shelter and a multiplier for other expenditures.



families spending below the median level on these three categories—see [Chapter 2](#).) Multipliers in recently published expert budgets (Renwick, 1993a; Schwarz and Volgy, 1992), after adjustment to the proposed concept, fall in the range of 1.14 to 1.30 for the reference family type.

The ranges that we suggest for food, clothing, and shelter and the multiplier produce a reasonable threshold, even though the range for food, clothing, and shelter is 78-83 percent of the median level of spending on these categories by two-adult/two-child families; in 1992 that median was \$15,344. The reason that the threshold is reasonable is because the average family (*not* the average low-income family) spends only about 45 percent of its budget on food, clothing, and shelter (Bureau of the Census, 1993d: Table 708). Hence, taking a relatively large proportion of median expenditures on food, clothing, and shelter, which represent less than half the typical budget, and applying a multiplier in the range of 1.15 to 1.25 will produce a threshold that is lower than a relative threshold of one-half median total expenditures (or after-tax income).

Whatever level is selected for the initial threshold, the key point of our procedure is how that level is updated over time. Each year, the updating procedure will use the same percentage of median expenditures on food, clothing, and shelter and the multiplier that were determined for the initial threshold and use them to update the threshold with newer expenditure data.<sup>15</sup> Consequently, the updating over time will be pegged to the level of spending on food, clothing, and shelter, not to the spending on all goods or to the growth in income overall. This difference is quite important because food, clothing, and shelter expenditures are likely to increase proportionately less than total expenditures (or income). Hence, a threshold that is updated as we recommend is likely to increase less than would a purely relative threshold.

Finally, we want to make clear that building a poverty threshold on food, clothing, and shelter plus a little more—and linking changes in the thresholds to changes in consumption of these items—do not imply that families must spend their income accordingly. For example, families that spend less on food, clothing, and shelter than implied in the poverty threshold are not necessarily poor—perhaps they grow some of their own food or make some of their own clothing in order to increase their income for other spending (e.g., on books, haircuts, or a vacation). Such families are poor if their total income (net of nondiscretionary expenses) is below the poverty line, but not otherwise. Conversely, families that spend more on food, clothing, and shelter than

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<sup>15</sup> It is convenient in setting the initial threshold to look at percentiles of the expenditure distribution on food, clothing, and shelter (i.e., the dollar values that include the lowest 20%, 25%, 30%, 35%, 40%, and so on of two-adult/two-child families). However, for updating purposes, the dollar level for food, clothing, and shelter must be expressed as a percentage of median expenditures on these categories; see [Chapter 2](#).

implied in the poverty threshold may (or may not) be poor, depending on their net income compared with the poverty threshold.

Just as we have urged the development of indicators of other kinds of deprivation (e.g., physical, social) in addition to the economic poverty measure, it would be useful to have indicators that directly measure inadequate food consumption (including hunger) and inadequate housing (including homelessness). It would also be useful to have tabulations of how people below the poverty threshold spend their income. For this to be possible, improvements must be made in both the expenditure and the income data in the CEX (see below).

### **Adjusting the Thresholds—Equivalence Scale**

A poverty threshold that is appropriate for one type of family is not necessarily appropriate for another. One difference is that the level of consumption needed for a child is not the same as that for an adult. Also, a larger family enjoys some economies of scale: it can make bulk purchases and use hand-me-down clothing, and although it may need more bedrooms, it does not need more kitchens or living rooms than a smaller family. Adjustments to the reference family poverty threshold to reflect differences in family size and composition are made by applying an "equivalence scale." Unfortunately, there is no research-based consensus about how large the scale economies are for larger families, nor about how much children consume, on average, relative to adults. Hence, there are no clear guidelines for adjusting the poverty threshold for families of different sizes and structures.

For family size, if one starts with some benchmark family of a specific size and with some specific expenditure level, there is no completely objective way to determine what level of expenditure by a family of some other size is in fact equivalent in terms of well-being or satisfaction. Thus, there is no way to specify the "scale economy factor" by which the poverty threshold for a reference family should be adjusted for different size families. Yet the magnitude of this factor can have a very large influence on the composition and magnitude of the poverty population.<sup>16</sup>

At one extreme, no adjustment for family size (i.e., a scale economy factor of 0.0) would give the same poverty threshold for an unrelated individual and for a family of five or more. The implication is that all additional family members beyond the first are completely costless, and the result would surely be to underestimate the extent of poverty for larger families relative to smaller families. At the other extreme, a "full" adjustment (i.e., a scale economy

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<sup>16</sup> The reader needs to keep in mind that a lower value of the scale economy factor (i.e., closer to zero) means greater scale economies, and a higher value of the factor (i.e., closer to 1.0) means lesser scale economies.

factor of 1.0) would result in a poverty threshold for a family of five that is five times as much as the threshold for a single individual. The implication is that there are no economies of scale whatsoever—that each added member costs the family as much as the first member—and the result would be to overestimate the extent of poverty for larger families relative to smaller families. Neither extreme is defensible, and the debate in the research literature can be understood as a debate about the correct level for this factor, somewhere between the two extremes.

There is growing consensus, however, that the equivalence scale implicit in the official poverty thresholds is not internally consistent and exhibits an irregular pattern. The inconsistency comes from the fact that the scale is based on the dietary needs of family members even though the economies of scale appear to be different for food and for other goods, like housing or transportation. In addition, the current measure reflects ad hoc adjustments for single people living alone or without other relatives and for two-person families. Finally, the current measure has lower thresholds for single people and couples who are aged 65 or older than for younger single people and couples.

We conclude that the equivalence scale that is embedded in the official poverty thresholds should not be retained. We recommend that the scale for the poverty thresholds account for differences between the needs of adults and children under 18 but not further distinguish family members (adults or children) by age or other characteristics. We also recommend that the scale incorporate a scale economy factor to reflect economies for larger families.

The equivalence scale should take the following general form:

$$(A + PK)^F.$$

The quantity  $A$  is the number of adults in a family; the quantity  $K$  is the number of children, each of whom is treated as a proportion  $P$  of an adult. Thus,  $(A + PK)$  reflects the size of the family in adult equivalents, and  $F$  is the scale economy factor that converts these adult equivalents into comparable units in terms of their efficient use of the family's resources. We recommend values for both  $P$  and  $F$  near 0.70; to be specific, we recommend setting  $P$  at 0.70 (i.e., each child is treated as 70% of an adult) and  $F$  in the range of 0.65 to 0.75.

The result of implementing the formula for the reference family of two adults and two children, with  $P$  equal to 0.70 and  $F$  equal to 0.75, is an equivalence scale value of 2.5 (3.4 adult equivalents raised to a power of 0.75). To calculate the poverty threshold for any other combination of adults and children, the ratio of the scale value from the formula for that family type to the scale value of 2.5 is applied to the reference family threshold. For example, the scale value for a one-adult/one-child family, with  $P$  equal to 0.70 and  $F$  equal to 0.75, is 1.49 (the result of raising 1.7 adult equivalents to a power of 0.75). Hence, the poverty threshold for a one-adult/one-child

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family is 60 percent (1.49/2.5) of the threshold for the two-adult/two-child family.

We are confident that this equivalence scale has an appropriate form; however, the selection of the two key parameters—for the proportionate needs of children and the scale economy factor—involves judgement. In selecting the values for these parameters, it is important to recognize the interaction between them. For example, several studies and advisers to the panel have suggested the use of a scale economy factor of 0.50 (implying greater economies than our suggested range of 0.65-0.75), but coupled with the assumption that children cost the same as adults. Given a scale, such as we propose, in which children are assumed to need less than adults, it is appropriate to raise the scale economy factor closer to a value of 1, although how much closer is, to repeat, a matter of judgement.

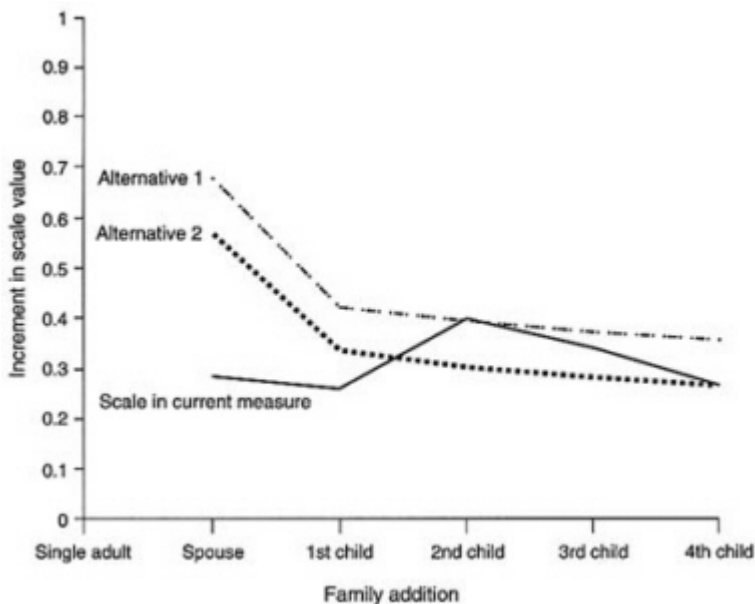
**RECOMMENDATION 3.1. The four-person (two adult/two child) poverty threshold should be adjusted for other family types by means of an equivalence scale that reflects differences in consumption by adults and children under 18 and economies of scale for larger families. A scale that meets these criteria is the following: children under 18 are treated as consuming 70 percent as much as adults on average; economies of scale are computed by taking the number of adult equivalents in a family (i.e., the number of adults plus 0.70 times the number of children), and then by raising this number to a power of from 0.65 to 0.75.**

Figure 1-2 portrays the equivalence scale for selected family types under our proposal compared with the scale implicit in the current poverty thresholds. The graph indicates the percentage by which a single person's poverty threshold is increased when that person acquires a spouse and when the couple subsequently has a first, second, third, and fourth child. The figure makes clear the irregularities and anomalies in the current scale. For example, under the current scale, a spouse adds only 29 percent to family costs; the first child adds almost as much (26%), and the second child adds a yet greater amount (40%). These patterns are not consistent with the view that adults need more than children nor with economies of scale for larger families. In contrast, our proposed scale adds 57-68 percent for a spouse (depending on whether the scale economy factor is 0.65 or 0.75), 34-42 percent for the first child, and a decreasing percentage for each additional child.

### Adjusting the Thresholds—Geographic Variations

A frequently voiced criticism of the current poverty thresholds is that they take no account of variations in the cost of living in different geographic areas of the country. Such variations—for example, large differences in housing

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**FIGURE 1-2** Alternative equivalence scales. NOTES: Alternatives 1 and 2 use scale economy factors of 0.75 and 0.65, respectively; both alternatives assume children need 70 percent as much as adults. The increments are relative to a scale value of 1.0 for a single adult.

costs between coastal metropolitan areas and the heartland—seem obvious to the public, and, indeed, are often the subject of media attention. Poverty thresholds that recognize such differences seem clearly preferable to those that do not. Unfortunately, this is a topic for which limitations in data greatly constrain one's options. For example, although BLS publishes price indexes for a number of metropolitan areas, no indexes are published for nonmetropolitan areas. Moreover, the BLS price indexes are not designed to permit comparisons of cost-of-living differences across areas; rather, they compare rates of change in price inflation: one can determine whether prices are rising faster in Los Angeles than in New York City, for example, but not whether the cost of living is higher in one or the other area.

Despite data limitations, we believe that some adjustment to the poverty thresholds should be made for geographic cost-of-living variations. Research conducted by BLS analysts suggests that variations are minor for some items, such as food (Kokoski, Cardiff, and Moulton, 1994), but that they are large for housing (including utilities), which is a large component of the proposed

poverty-level budget. Also, data are available from the 1990 census with which to estimate differences in rental housing costs across the entire country, making possible at least a partial adjustment of the poverty thresholds for geographic cost-of-living differences.

We analyzed the census data to determine adjustments that, in light of other studies, seem reasonable to apply to the housing component of the proposed poverty thresholds. We believe that at this stage of knowledge the adjustments should be made for relatively large geographic areas. Our analysis examined census-based housing cost adjustments by region and state and by several population size categories of metropolitan areas.<sup>17</sup> On balance, it appears that size of place is a more important correlate of housing costs than is state of residence; most states include urban and rural areas that vary widely in population density and housing costs. Hence, we recommend that adjustments for housing cost differences—calibrated to reflect the share of housing in the proposed poverty budget—be implemented for nine regions of the country and, within each region, by several population size categories of metropolitan areas. The adjustments that we developed from our analysis and used in estimating the effects of the proposed measure are provided in [Table 1-5](#).<sup>18</sup>

**RECOMMENDATION 3.2. The poverty thresholds should be adjusted for differences in the cost of housing across geographic areas of the country. Available data from the decennial census permit the development of a reasonable cost-of-housing index for nine regions and, within each region, for several population size categories of metropolitan areas. The index should be applied to the housing portion of the poverty thresholds.**

It would be desirable to update the adjustment factors that are applied to the housing component of the poverty thresholds more frequently than once every 10 years. We encourage research to determine reasonable updating methods. For example, it may be that HUD's methods for updating fair market rents could be adapted for this purpose.

**RECOMMENDATION 3.3. Appropriate agencies should conduct research to determine methods that could be used to update the geographic housing cost component of the poverty thresholds between the decennial censuses.**

<sup>17</sup> We adapted the HUD methodology for constructing fair market rents by locality.

<sup>18</sup> We did not address the special circumstances of Alaska and Hawaii, for which a housing cost adjustment based on the Pacific states region as a whole may not be sufficient to reflect the high cost of living in these states. Also, although we do not recommend state-by-state adjustments for the statistical measure of poverty, such adjustments may make sense for the AFDC program (see [Chapter 8](#)).

TABLE 1-5 Poverty Thresholds Adjusted for Differences in Cost of Housing, Expressed as Percentages Above or Below a National Poverty Threshold

Region and Area	Percentage Difference
<i>North</i>	
New England (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont)	
Nonmetropolitan areas and metropolitan areas under 250,000 population	+12.8
Metropolitan areas 250,000–500,000 pop.	+12.8
Metropolitan areas 500,000–1,000,000 pop.	+14.8
Metropolitan areas 1,000,000–2,500,000 pop.	+14.1
Metropolitan areas 2,500,000 or more pop.	+20.9
Middle Atlantic (New Jersey, New York, Pennsylvania)	
Nonmetropolitan areas and metropolitan areas under 250,000 population	-9.2
Metropolitan areas 250,000–500,000 pop.	-0.3
Metropolitan areas 500,000–1,000,000 pop.	+2.0
Metropolitan areas 1,000,000–2,500,000 pop.	-2.5
Metropolitan areas 2,500,000 or more pop.	+18.7
<i>Midwest</i>	
East North Central (Illinois, Indiana, Michigan, Ohio, Wisconsin)	
Nonmetropolitan areas and metropolitan areas under 250,000 population	-10.4
Metropolitan areas 250,000–500,000 pop.	-4.1
Metropolitan areas 500,000–1,000,000 pop.	-1.3
Metropolitan areas 1,000,000–2,500,000 pop.	-0.5
Metropolitan areas 2,500,000 or more pop.	+5.9
West North Central (Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota)	
Nonmetropolitan areas and metropolitan areas under 250,000 population	-13.9
Metropolitan areas 250,000–500,000 pop.	-3.8
Metropolitan areas 500,000–1,000,000 pop.	-1.9
Metropolitan areas 1,000,000–2,500,000 pop.	+2.8
Metropolitan areas 2,500,000 or more pop.	N.A.
<i>South</i>	
South Atlantic (Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia)	
Nonmetropolitan areas and metropolitan areas under 250,000 population	-10.1
Metropolitan areas 250,000–500,000 pop.	-3.9

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Region and Area	Percentage Difference
<i>South Atlantic—continued</i>	
Metropolitan areas 500,000–1,000,000 pop.	+0.7
Metropolitan areas 1,000,000–2,500,000 pop.	+4.3
Metropolitan areas 2,500,000 or more pop.	+11.9
<i>East South Central (Alabama, Kentucky, Mississippi, Tennessee)</i>	
Nonmetropolitan areas and metropolitan areas under 250,000 population	-17.3
Metropolitan areas 250,000–500,000 pop.	-6.5
Metropolitan areas 500,000–1,000,000 pop.	-5.3
Metropolitan areas 1,000,000–2,500,000 pop.	N.A.
Metropolitan areas 2,500,000 or more pop.	N.A.
<i>West South Central (Arkansas, Louisiana, Oklahoma, Texas)</i>	
Nonmetropolitan areas and metropolitan areas under 250,000 population	-14.2
Metropolitan areas 250,000–500,000 pop.	-8.9
Metropolitan areas 500,000–1,000,000 pop.	-5.8
Metropolitan areas 1,000,000–2,500,000 pop.	-3.8
Metropolitan areas 2,500,000 or more pop.	+0.5
<i>West</i>	
<i>Mountain (Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming)</i>	
Nonmetropolitan areas and metropolitan areas under 250,000 population	-11.2
Metropolitan areas 250,000–500,000 pop.	-2.4
Metropolitan areas 500,000–1,000,000 pop.	+3.9
Metropolitan areas 1,000,000–2,500,000 pop.	+0.3
Metropolitan areas 2,500,000 or more pop.	N.A.
<i>Pacific (Alaska, California, Hawaii, Oregon, Washington)</i>	
Nonmetropolitan areas and metropolitan areas under 250,000 population	-3.1
Metropolitan areas 250,000–500,000 pop.	+1.8
Metropolitan areas 500,000–1,000,000 pop.	+2.8
Metropolitan areas 1,000,000–2,500,000 pop.	+10.4
Metropolitan areas 2,500,000 or more pop.	+21.7

NOTES: Housing cost indexes are calculated from 1990 census data on gross rent for apartments with specified characteristics, adjusted to reflect the share of housing in the proposed poverty budget (see [Chapter 3](#)). Nonmetropolitan areas are combined with metropolitan areas of less than 250,000 population because of restrictions on geographic area coding in the Current Population Survey and Survey of Income and Program Participation.  
 N.A., not applicable.

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Finally, further research and perhaps additional data collection are needed on adjustments to the poverty thresholds for geographic cost-of-living differences. We encourage research that could lead to more sophisticated adjustments for differences in housing costs and, ultimately, to adjustments that reflect cost differences for other goods and services.

**RECOMMENDATION 3.4. Appropriate agencies should conduct research to improve the estimation of geographic cost-of-living differences in housing as well as other components of the poverty budget. Agencies should consider improvements to data series, such as the BLS area price indexes, that have the potential to support improved estimates of cost-of-living differences.**

### Defining Family Resources

Under the official U.S. poverty measure, a family's poverty status is determined by comparing its gross money income to the appropriate threshold. A number of researchers have argued that a preferable comparison is between a family's consumption (or expenditures) and the appropriate poverty threshold. One can make arguments for either approach, depending in part on one's view as to whether poverty is more appropriately assessed as the actual or the potential attainment of a minimally adequate standard of living. Whatever one's view, the United States does not have adequate data sources with which to develop a consumption or expenditure-based poverty measure: the sample size of the CEX is too small to provide reliable poverty measures for population groups or by geographic area. To make the CEX adequate for purposes of poverty measurement would require an expensive expansion of the sample size and a redesign of the survey, which is focused on providing information needed to revise the market basket for the CPI.

In contrast, the United States has large, well-developed surveys for measuring income. Thus, we conclude that the measurement of poverty in the United States must continue, at least for some years, to be based on an income-based definition of family resources. However, we believe that the current concept of gross money income is inadequate in many respects and needs to be modified in order to be consistent with the proposed threshold concept.

We stressed earlier the importance of consistency between the concept underlying the poverty thresholds and the definition of resources. The current measure violates this principle, as has some recent work to investigate alternatives. For example, estimates by the Census Bureau (see, e.g., Bureau of the Census, 1993a) and others in which the value of public and private health insurance benefits is added to families' resources are inconsistent with the thresholds. The reason is that, since the official thresholds were first

developed, medical care costs have escalated greatly, so that the effect of including insurance values without also raising the thresholds is to ignore the added costs of staying out of poverty.

**RECOMMENDATION 4.1. In developing poverty statistics, any significant change in the definition of family resources should be accompanied by a consistent adjustment of the poverty thresholds.**

To achieve consistency with the proposed poverty budget, the definition of family resources (or income) must represent disposable money and near-money resources: it should include the value of in-kind resources that are available for consumption, and, conversely, it should deduct from income required expenditures that are not available for consumption. We note that the major public assistance programs, such as food stamps and AFDC, currently use a similar definition of disposable or "countable" income to determine eligibility and benefits.

**RECOMMENDATION 4.2. The definition of family resources for comparison with the appropriate poverty threshold should be disposable money and near-money income. Specifically, resources should be calculated as follows:**

- **estimate gross money income from all public and private sources for a family or unrelated individual (which is income as defined in the current measure);**
- **add the value of near-money nonmedical in-kind benefits, such as food stamps, subsidized housing, school lunches, and home energy assistance;**
- **deduct out-of-pocket medical care expenditures, including health insurance premiums;**
- **deduct income taxes and Social Security payroll taxes;**
- **for families in which there is no nonworking parent, deduct actual child care costs, per week worked, not to exceed the earnings of the parent with the lower earnings or a cap that is adjusted annually for inflation;**
- **for each working adult, deduct a flat amount per week worked (adjusted annually for inflation and not to exceed earnings) to account for work-related transportation and miscellaneous expenses; and**
- **deduct child support payments from the income of the payer.**

### **In-Kind Benefits—Nonmedical**

The official poverty thresholds, as originally conceived, and the panel's proposed thresholds, although developed in somewhat different ways, reflect the

concept of a budget for consumption needs. Hence, it is clear that the definition of family resources should add to money income the value of near-money in-kind benefits that are intended to support consumption. Thirty years ago, assistance programs that provided in-kind benefits rather than money were small in number and scope. Subsequently, such programs—which include food stamps, subsidized housing, school lunches, meal programs for the elderly, and home energy assistance—have expanded greatly, and the poverty measure should take account of their effects.

Some in-kind benefits are harder to value than others because they are less fungible (i.e., less interchangeable with other resources) and of less value to the recipient than the same amount of money income: public housing raises the most problems in this regard. Also, for some types of benefits (e.g., employer-provided housing or meals), there is little information or experience with how to value them. However, we believe that the Census Bureau has sufficient experience with valuing the major types of in-kind benefits so that reasonable estimates can be added to money income without waiting for further research. Of course, research should continue on improved methods for valuing in-kind benefits, and changes in methodology should be made as appropriate. (Employer-provided benefits that are necessary for work, such as subsidized child care, parking, or free uniforms or tools, should not be valued as part of income because the proposed definition of disposable income subtracts out-of-pocket costs for child care and other work-related expenses, net of any employer subsidy.)

### Medical Care Costs

Perhaps the most striking omission from the list of in-kind benefit programs that we propose to count as family resources for purposes of measuring poverty is medical care benefits. Certainly, Medicare, Medicaid, and employer-provided health insurance have helped many millions of Americans over the past three decades. It seems odd that the proposed poverty measure does not explicitly reflect this achievement of public policy and also does not explicitly reflect the gaps in health insurance coverage of the population that still exist. In fact, the proposed measure does take account of health insurance benefits, but indirectly—in terms of the extent to which they reduce out-of-pocket medical care expenses and thereby increase disposable income for other consumption. Also, we recommend that separate measures be developed of the economic risk from inadequate or no health insurance coverage to accompany the measure of economic poverty.

Researchers have wrestled with the valuation of health care benefits for purposes of poverty measurement for over a decade, without providing satisfactory solutions. One reason is that, in contrast to such benefits as food stamps, health care benefits are not very fungible. Food stamps are fungible for

two reasons: essentially all households spend at least some money for food, so the receipt of food stamps frees up money income for consumption of other goods; also, the maximum food stamp allowance is low enough that it is unlikely households would receive more benefits than the amount they would otherwise choose to spend on food. Neither of these conditions holds for medical care benefits. First, not all households have medical care needs during the year. Second, although medical care benefits for, say, a low-cost prescription or for a doctor's visit may free up money income for other consumption, the "extra" benefits received from insurance (or free care) to cover, say, expensive surgery are not likely to free up money income commensurately. Hence, it is misleading to add medical care benefits to resources without also acknowledging the costs of medical care in the poverty budget. But the development of appropriate adjustments to the thresholds is a difficult task because of the great variation in health care needs across the population.

One proposal is to have a "two-index" poverty measure, in which people must satisfy two tests to be considered not poor: they must have adequate resources to obtain nonmedical necessities (e.g., food), *and* they must have adequate medical insurance coverage or sufficient resources with which to buy such coverage. Such an approach is appealing, but it poses considerable operational difficulties, for example, determining what is "adequate" health insurance coverage, in general, and for different groups. Also, the two components of the measure are not consistent, in that the medical component measures a risk (e.g., an expensive illness) that may or may not have materialized for a family or individual over the time span for which poverty is determined, while the nonmedical component measures the actual ability of the family or individual to obtain such universally required items as food.

Further complicating the whole issue is that, despite widespread medical care coverage, many people still face high out-of-pocket costs, such as the employee share of health insurance premiums, payments for deductibles, copayments, and payments for noncovered services. Very little consideration has been given to the appropriate treatment of such costs in a poverty measure. The original thresholds implicitly allowed for some out-of-pocket medical care expenditures in the multiplier, but not for the fact that such costs differ substantially by people's health status and other characteristics. Because the official thresholds do not reflect such differences, the poverty rate for some groups is underestimated, and for other groups it is overestimated.

We argue for an approach that separates the measurement of economic poverty from the measurement of medical care needs and the adequacy of resources to meet those needs. Hence, the proposed threshold concept includes such goods and services as food and housing but not medical care. For consistency, we do not propose to add the value of medical care benefits to income, and, further, we propose to subtract out-of-pocket medical care

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expenses from income. The result is a consistent measure of economic poverty.<sup>19</sup>

Although the proposed measure excludes medical care from both the poverty thresholds and family resources, it does not ignore the effect of changes in health care policy on economic poverty. Thus, the proposed measure will capture the effects of policy changes (e.g., extension of health insurance coverage) that reduce the need for out-of-pocket expenditures for medical care and thereby increase disposable income to spend on food, housing, and other goods and services. It will also capture the effects of policy changes (e.g., tax increases to pay for health insurance) that reduce disposable income. The proposed measure will not, however, directly assess the extent to which people have access to an adequate package of health insurance benefits that protects them against risk. Hence, we believe it would be highly desirable to publish regularly a "medically needy" index (more properly, an index of the risk of not being able to afford needed care) and to cross-tabulate it with the poverty measure. However, we do not believe such a medically needy index should be a part of the poverty measure because it would inordinately complicate the measure.

Finally, as changes are made to the U.S. system of health care, it will be important to reevaluate the treatment of medical care expenses in the definition of family resources. As an example, if relatively generous health insurance coverage is made available to everyone, the amount of out-of-pocket costs that is subtracted from income should likely be subject to an upper limit or cap.

**RECOMMENDATION 4.3. Appropriate agencies should work to develop one or more "medical care risk" indexes that measure the economic risk to families and individuals of having no or inadequate health insurance coverage. However, such indexes should be kept separate from the measure of economic poverty.**

## Taxes

The appropriate definition of family resources for comparison with a poverty threshold that does not include income or payroll taxes is an after-tax definition. Income and payroll tax dollars are assuredly not available for consumption. Also, it is misleading for the poverty measure not to reflect changes in tax laws when such changes affect the amount of disposable income that is available for consumption. The alternative would be to include taxes in the

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<sup>19</sup> Canada and Western European countries do not take account of medical care benefits in their poverty measures. Because they have some type of national health insurance, they treat medical care benefits as they do public education or the police force, namely, as government services that are universally available and whose effects would simply cancel out in a poverty measure (i.e., a benefit would be added to resources that matched whatever expenditure might be deemed "necessary" in the poverty budget).

poverty thresholds, but this approach would unnecessarily complicate them: for example, at a minimum, there would have to be different thresholds for workers and nonworkers. The Census Bureau has considerable experience with developing after-tax estimates of income so that subtracting income taxes and payroll taxes from gross family income for calculating poverty rates will not be difficult. Sales and property taxes do not need to be subtracted since they are included in the CEX expenditure data and hence accounted for in the poverty thresholds.

### **Work-Related Expenses**

To earn money from a job almost always requires a worker to use some of that money on work expenses. Just as income used for taxes is not available for consumption, neither is the amount of earnings devoted to work expenses; hence, such expenses should not be counted as family resources. Specifically, child care costs that are necessary for a parent to hold down a job should be deducted from earnings, as should an allowance for other work-related expenses (e.g., commuting costs).

We propose that actual child care expenses be deducted per week worked for families in which there is no nonworking parent, up to the earnings of the parent with the lower earnings or a cap that is adjusted annually for inflation (whichever value is lower). The cap could initially be based on the maximum employment-related child care expenses—\$2,400 for one child and \$4,800 for two or more children—that are allowed in computing the federal dependent care income tax credit.

Alternatively, the cap could be developed as a percentage of median child care expenditures by families with one or two or more children, similar to the proposal for developing the food, clothing, and shelter component of the poverty threshold. In the 1990 SIPP, the annualized value of median weekly expenditures (in 1992 dollars) for families who paid for child care was about \$2,300 for families with one child and \$2,700 for families with two or more children. The issue of an appropriate cap is complicated by the age of a family's children: a more generous cap seems appropriate for pre-school-aged children than for older children. Indeed, the relatively low median child care expenses by families with two or more children relative to families with one child, as measured in SIPP, is undoubtedly because more families in the former group have older children.

In the case of other work-related expenses, such as commuting, we propose that a flat allowance per week worked, updated annually for inflation, be deducted from the earnings of each adult worker in the family. The reason to deduct a flat amount, rather than actual expenses, is because of the tradeoff that people often make between housing and commuting costs, by choosing a more expensive home closer to work or a less expensive one farther away. As each family in an area will have the same adjustment to the poverty threshold

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for housing costs, so each worker needs to have the same work expense deduction.

For a family with child care expenses, the total of child care costs plus other work-related expenses for the parent with the lower earnings should not exceed that parent's earnings. The amount of the flat deduction for other work-related expenses could be developed as a percentage of the median. Data from the 1987 SIPP indicate that median weekly expenditures of adult workers for commuting and other work expenses (e.g., tools and uniforms) are about \$17.00 (in 1992 dollars).

Instead of deducting child care and other work-related expenses from earnings, an alternative approach would be to include them in the poverty budget. However, this approach would require separate thresholds for working families with and without children and by number of earners, as well as for nonworking families.

### **Child Support Payments**

The argument for excluding child support payments from the family income of the payer is the same argument of consistency that we have made throughout this discussion. At present, child support payments are counted as part of gross money income of the families that receive them, which is appropriate, because the payments are available for consumption by these families. However, the amounts are not deducted from the income of the families that pay them, which is inappropriate, because the payments are not available for consumption by those families. Thus, we propose that child support payments be deducted from the income of families that pay them.

### **Services from Home Ownership**

Estimates of families' economic resources, to be comparable for renters and homeowners, should take account of the flow of services that owners obtain from their homes. Thus, people with low or no mortgage payments or other ownership costs do not face the same housing costs as renters or other homeowners and so should have a rental equivalence value (a type of in-kind benefit) added to their income. Alternatively, one could lower the threshold for such families to recognize that they do not have the same budgetary requirements for shelter as other families. However, it does not seem feasible with available data to develop adequate rental imputations. Hence, valuation of home ownership services is a priority area for further research and consideration for implementation in the poverty measure at a later date.

### **Assets**

Some researchers have argued that families' asset holdings should be considered

in some way in determining their poverty status. Financial assets, such as savings accounts and stocks, can often be converted to cash to tide families over a period of low-income. Property assets (e.g., houses, land, cars, household furnishings) can also be converted to cash, although often not as readily. Assistance programs such as AFDC and food stamps allow families to have their own home, furnishings, and a cheap car, but otherwise place a low limit on the assets they can hold and still be eligible for benefits. The reason for the asset limit is the programs' short accounting periods: they allow families to qualify for benefits on the basis of having low-income for a period as short as 1 or 2 months, provided that the families have few or no financial assets on which they can draw.

For purposes of poverty measurement, however, for which the accounting period is a year, it does not seem sensible to add asset values to nonasset income. In most cases, asset values will only raise income-poor people above the poverty line for short periods, after which they are still poor. It is more appropriate, instead, to define resources as disposable income from all sources, including any income from assets, such as interest or rents (although very few income-poor people have financial assets in any case; see [Chapter 4](#)). However, we recognize that for some purposes it may be desirable to have companion measures that take account of some types of assets. Thus, measures for shorter periods (e.g., 4 months) may be more useful than annual measures to evaluate how effectively assistance programs with short accounting periods target benefits to needy people. For consistency with program rules, short-term poverty measures will need to include financial asset values.

### Effects

What difference would it make to poverty statistics to adopt the proposed measure in place of the current measure? Developing a few concrete examples of prototypical families and their poverty status under the two measures can help illustrate the differences between them. [Figure 1-3](#) shows four examples of single-parent families with two children who, under our proposal, have different poverty thresholds—relative to the official threshold—depending on where they live. These examples are somewhat contrived, but they illustrate the potential effects of adopting the proposed measure for families with different sources of income in different areas of the country.

The family on welfare in a big New England city, Case 1, is poor under the current measure and is also poor under the proposed measure: adding the value of in-kind benefits to the family's cash welfare income does not raise that income above either the official threshold or the adjusted threshold (which is higher due to the cost of housing). In contrast, the family on welfare in a rural area of the upper Midwest, Case 2, is poor under the current measure but is not poor under the proposed measure: in this case, adding the value of in-kind

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**CASE 1: Three-person family in big New England city**

Official threshold: \$11,304  
 Revised threshold: \$13,522

Gross regular money income: \$ 6,662—from AFDC; maximum benefit  
 Disposable income: \$ 9,583—from AFDC; food stamps, school lunch and breakfast

Poverty status, current: Poor  
 Poverty status, proposed: Poor



**CASE 2: Three-person family in rural area of upper Midwest**

Official threshold: \$11,304  
 Revised threshold: \$ 9,322

Gross regular money income: \$ 6,390—from AFDC; maximum benefit  
 Disposable income: \$ 9,385—from AFDC; food stamps, school lunch and breakfast

Poverty status, current: Poor  
 Poverty status, proposed: Not poor



**CASE 3: Three-person family in big New England city**

Official threshold: \$11,304  
 Revised threshold: \$13,522

Gross regular money income: \$13,000—wages from full-time job paying \$6.50 per hour  
 Disposable income: \$ 9,798—wages plus EITC minus payroll taxes, child care, work expenses, out-of-pocket medical expenses

Poverty status, current: Not poor  
 Poverty status, proposed: Poor



**CASE 4: Three-person family in rural area of upper Midwest**

Official threshold: \$11,304  
 Revised threshold: \$ 9,322

Gross regular money income: \$10,000—wages from full-time job paying \$5.00 per hour  
 Disposable income: \$ 7,969—wages plus EITC minus payroll taxes, child care, work expenses, out-of-pocket medical expenses

Poverty status, current: Poor  
 Poverty status, proposed: Poor



**FIGURE 1-3** Poverty status of hypothetical three-person (one-adult/ two-child) families under current and proposed poverty measures, 1992.

NOTE: Revised thresholds are based on the 0.75 scale economy factor and the relevant housing cost adjustment factor.

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benefits raises the family's income above the adjusted poverty threshold (which is lower than the official threshold because of the housing cost adjustment).

The family with a working parent in a big New England city, Case 3, is not poor under the current measure but is poor under the proposed measure: subtracting such expenses as child care reduces the family's income below both the official threshold and the adjusted threshold. In contrast, the family in the rural upper Midwest, with a parent who works at a lower pay rate, Case 4, is poor under both the current measure and the proposed measure.

We also conducted an extensive analysis with the March 1993 Current Population Survey data files of poverty rates under the current measure and the proposed measure (see [Chapter 5](#)). To implement the proposed family resource definition with the March 1993 CPS, we performed imputations for such components as child care and out-of-pocket medical care expenses by using data from SIPP and the National Medical Expenditure Survey. We were able to take advantage of the Census Bureau's research and development program for other components, such as income and payroll taxes and nonmedical in-kind benefits.<sup>20</sup> Although our data adjustments and imputations are not without problems, we believe the comparisons we obtained between gross money income and disposable money and near-money income for 1992 are reasonably accurate.<sup>21</sup>

### **Distributional Effects**

We carried out one set of comparisons to illustrate the effects of the current and proposed measures on the characteristics of people who are poor, holding constant the poverty rate for the total population. For this exercise, we determined the two-adult/two-child family threshold that, together with the proposed threshold adjustments (including the use of a 0.75 scale economy factor) and the proposed family resource definition, gave the same 1992 poverty rate as the official rate, 14.5 percent. The total number of poor people was about the same as the official number of 36.9 million. (The official reference family threshold for 1992 was \$14,228; the threshold that gave the same result with the proposed measure turned out to be \$13,175, a number that is purely an artifact of the analysis.)

In this exercise, the proposed measure produces about the same number

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<sup>20</sup> The only income component that we did not implement was an adjustment for child support payments. The March CPS lacks any information with which to determine who would most likely make such payments; this lack could be easily remedied by adding a question to the survey.

<sup>21</sup> We are grateful for the help we received from many agencies in obtaining the data with which to implement our proposed family resource definition with the March CPS (see Acknowledgments).

of poor people as the current measure, but they are not all the same people. Under the proposed measure, 7.4 million people are moved out of poverty, and 7.4 million are moved into poverty. That is, the proposed measure has significant effects on the composition of the poor population, changing about 20 percent of that population. Table 1-6 shows these changes for groups categorized by age, race, ethnicity, receipt of cash welfare, work status, health insurance status, and region of residence. This table also shows the poverty rates for each group under the current and proposed measures.

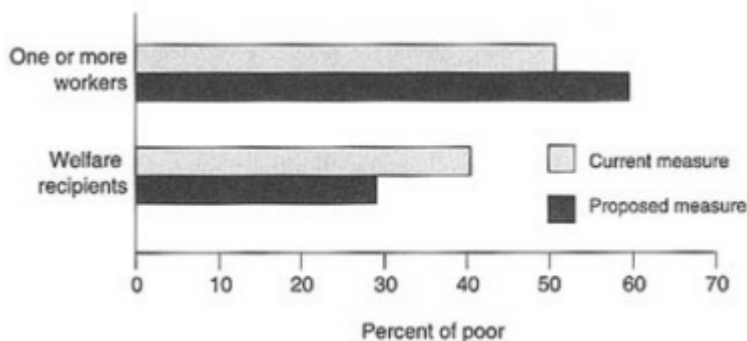
The greatest effect of the proposed measure is to decrease the percentage

TABLE 1-6 Poverty Statistics, 1992: Current Measure and Proposed Measure, Keeping the Overall Poverty Rate Constant

Population Group	Percent of Total Population	Percent of Poor Population		Poverty Rate for Population Group (%)	
		Current Measure	Proposed Measure	Current Measure	Proposed Measure
<b>Age</b>					
Children under 18	26.3	39.6	39.2	21.9	21.7
Adults 18–64	61.5	49.6	51.8	11.7	12.2
Adults 65 and older	12.2	10.8	9.0	12.9	10.8
<b>Race</b>					
White	83.6	66.8	69.3	11.6	12.0
Black	12.5	28.6	25.7	33.2	29.8
Other	3.9	4.6	5.1	17.4	19.1
<b>Ethnicity</b>					
Hispanic	8.9	18.1	20.9	29.4	34.0
Non-Hispanic	91.1	81.9	79.1	13.1	12.6
<b>Welfare Status of Family</b>					
Receiving cash welfare	9.9	40.4	29.9	59.4	44.0
Not receiving welfare	90.1	59.6	70.1	9.6	11.3
<b>Work Status of Family</b>					
One or more workers	81.1	50.8	58.9	9.1	10.6
No workers	18.9	49.2	41.1	37.9	31.7
<b>Health Insurance Status of Family</b>					
No health insurance	13.7	30.1	35.7	32.0	37.9
Some health insurance	86.3	69.9	64.3	11.8	10.8
<b>Region of Residence</b>					
Northeast	20.0	16.9	18.9	12.3	13.8
Midwest	24.0	21.7	20.2	13.1	12.2
South	34.4	40.0	36.4	16.9	15.4
West	21.6	21.4	24.5	14.4	16.5

NOTE: In the first, second, and third columns, the percentages for the categories within each characteristic (age, race, etc.) add to 100; in the last two columns, the percentages (rates) apply to each category individually. See text for thresholds used.

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**FIGURE 1-4** Effects of the proposed measure on the percentage of poor people in working families and families receiving cash welfare.

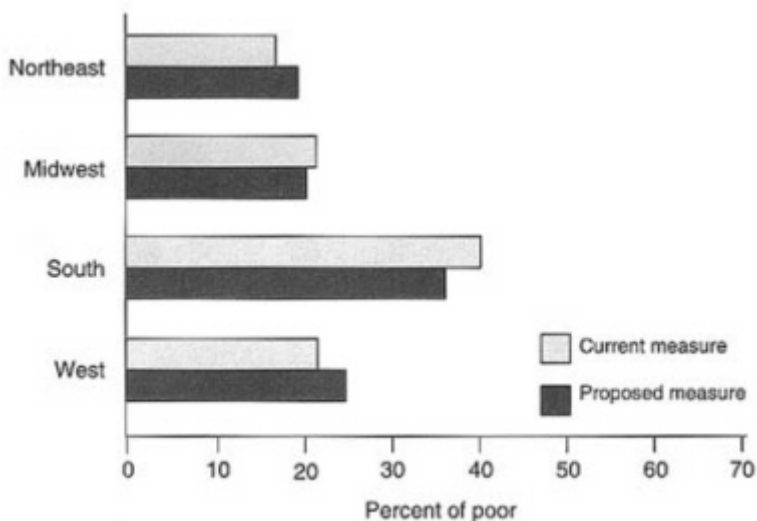
of poor people who are in families receiving cash welfare, AFDC and Supplemental Security Income (SSI), and to increase the percentage who are in working families; [Figure 1-4](#).<sup>22</sup> Largely because of the additions to income of the value of in-kind benefits, people in families receiving cash welfare account for just 30 percent of poor people under the proposed measure, compared with 40 percent under the current measure. In contrast, largely because of deductions from income of taxes, work expenses, and out-of-pocket medical care expenses, people in families with one or more earners account for 59 percent of poor people under the proposed measure, compared with 51 percent under the current measure. People in families receiving cash welfare still have a much higher poverty rate than the people in working families, but the difference is not as large under the proposed measure: the poverty rate for people in welfare families is 44 percent under the proposed measure and 59 percent under the current measure; the rate for people in working families is 11 percent under the proposed measure and 9 percent under the current measure.

Another effect of the proposed measure is to increase the poverty rate for people in families lacking health insurance coverage. They make up 36 percent of the poor under the proposed measure, compared with 30 percent under the current measure.

By age, children make up about the same percentage of poor people (39-40%) and have about the same, higher-than-average poverty rate (22%) under both the current and the proposed measures—because poor children live both in families receiving cash welfare and in families with one or more earners.

<sup>22</sup> Families receiving cash welfare and those with one or more earners overlap to some extent; people not in either group include some retirees, students, and others.

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**FIGURE 1-5** Effects of the proposed poverty measure on the geographic distribution of poor people.

However, the poverty rate for the elderly and their share of the poverty population are somewhat lower under the proposed measure, compared with the current measure, while the poverty rate for working-age adults and their share of poor people are somewhat higher.

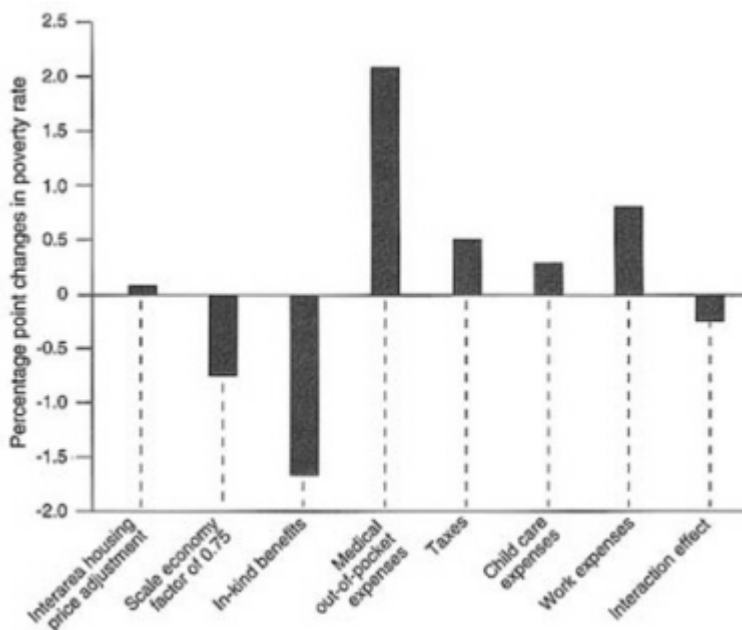
By region of the country, the poverty rates for residents of the Northeast and West are higher, and they make up larger percentages of poor people under the proposed measure, compared with the current measure. In contrast, the poverty rates for residents of the South and Midwest are lower, and they make up smaller percentages of poor people under the proposed measure; see [Figure 1-5](#). These shifts occur because of adjustments to the thresholds for geographic differences in the cost of housing.<sup>23</sup>

### Effects of Selected Components

We next considered the effects of specific components of the proposed measure on the overall poverty rate of 14.5 percent; see [Figure 1-6](#). Adjusting the thresholds for geographic differences in the cost of housing, while having significant distributional effects, has little effect on the poverty rate for the total population. However, the use of a scale economy factor of 0.75 for determining

<sup>23</sup> For the areas and states included in each region, see [Table 1-5](#), above.

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**FIGURE 1-6** Effects of selected components of the proposed measure on the poverty rate. NOTE: The official poverty rate in 1992 was 14.5 percent; see text for a discussion of the interaction effect.

equivalent thresholds for other family types decreases the rate somewhat (by 0.7 of a percentage point).

The addition to income of nonmedical in-kind benefits (e.g., food stamps) has a sizable effect, decreasing the rate by 1.7 percentage points. The subtraction of out-of-pocket medical care expenditures increases the rate by 2.1 percentage points. The subtraction of taxes, work expenses, and child care expenses increases the rate by 0.5, 0.8, and 0.3 of a percentage point, respectively.<sup>24</sup> In addition, there is an interaction effect that decreases the rate by 0.2 of a percentage point: this effect occurs because a combination of changes may move a family above (or below) the poverty line when a single change does not.<sup>25</sup>

<sup>24</sup> From tabulations with SIPP, we estimate that the subtraction of child support payments would also increase the poverty rate by a small fraction of a percentage point.

<sup>25</sup> The interaction effect would be positive if our analysis did not use a reference family threshold of \$13,175 in order to maintain the official 1992 poverty rate of 14.5 percent; this threshold value reduces the overall poverty rate by 1.2 percentage points.

### Effects on the Poverty Rate

We carried out another set of comparisons to illustrate the effects on the overall poverty rate of raising the poverty threshold in real terms, as well as implementing the recommended adjustments to the threshold and family resource definition. For this exercise, we used a two-adult/two-child family threshold of \$14,800, representing the midpoint of our suggested range for that threshold of \$13,700 to \$15,900.

Under the proposed measure—with a \$14,800 reference family threshold and a 0.75 scale economy factor—46.0 million people would have been classified as poor in 1992, for a poverty rate of 18.1 percent, compared with the official count of 36.9 million and the official poverty rate of 14.5 percent. Figure 1-7 shows the effects for both a 0.75 and a 0.65 scale economy factor,

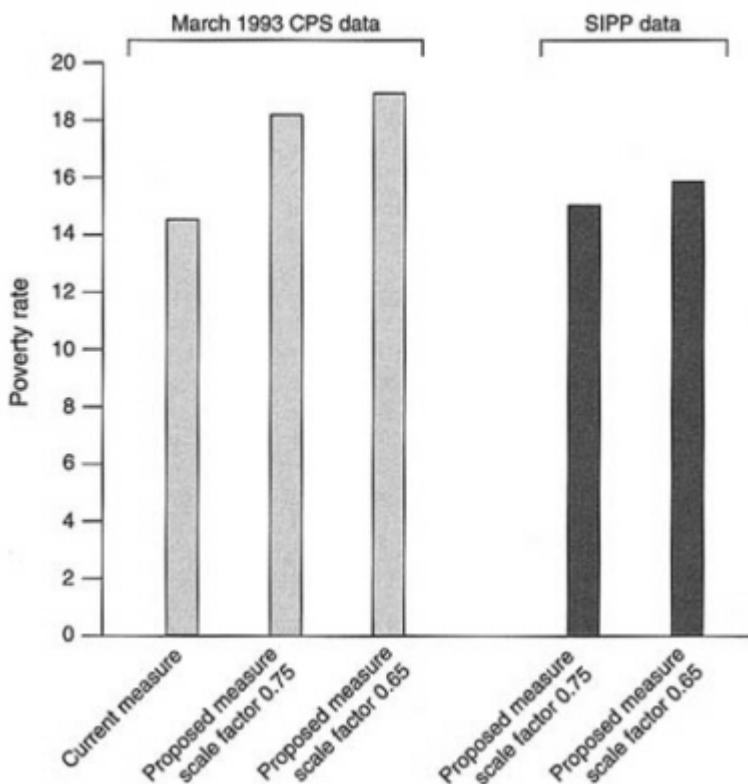


FIGURE 1-7 Poverty rates under the current and proposed measures, 1992.

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using both CPS and SIPP data.<sup>26</sup> The reason for the lower rates with SIPP data is that SIPP achieves more complete income reporting for lower income people.<sup>27</sup>

A higher reference family threshold explains part of the increase in the poverty rate, but the proposed changes to the resource definition (including the interaction of such changes as subtracting taxes and work expenses) account for the larger portion of the increase. Although the use of a \$14,800 reference family threshold and the proposed changes to the resource definition increase the number of poor, not all of the movement is in the same direction. For example, with a 0.75 scale economy factor, 4.2 million people are moved out of poverty, and 13.3 million people are moved into poverty.

### Time Trends

It is clear that the proposed poverty measure has important distributional and cross-sectional effects on estimates of poverty. What is less clear is the effect on time trends. We attempted to conduct the same kinds of analyses summarized above for 1992 with the March 1990, 1984, and 1980 CPS files, using the official thresholds for 1989, 1983, and 1979 and thresholds developed under the proposed concept for earlier years. However, we were not able to develop adequate imputations for 1979 or 1983 for such important components of the proposed resource definition as out-of-pocket medical care expenditures. Hence, the time-series results we obtained are not strictly comparable with our cross-sectional analyses for 1992. The results do show, however, the effects with the proposed poverty measure of changes in tax laws and changes in the provision of in-kind benefits, such as the curtailment of eligibility and benefits in the early 1980s—effects that are not evident with the current measure. (Both measures show the effects of changes in the business cycle over the 1980s.)

In looking to the future, it is likely that trends under the proposed measure will diverge from trends under the current measure. Certainly, the proposed measure will provide a more accurate picture of the effects of important government policy initiatives. For example, changes in the health care financing system that affect out-of-pocket medical care costs or changes in tax provisions that affect disposable income would be reflected in the proposed measure; they cannot affect the poverty rate under the current measure. We estimated the effects of the expansion of the Earned Income

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<sup>26</sup> The estimate for SIPP is based on the average difference of 3.2 percentage points between the overall poverty rates from SIPP and the March CPS for the period 1984-1991 (see [Chapter 5](#)). We could not use SIPP for our analysis because the Census Bureau had not yet completed work on procedures to estimate taxes and value in-kind benefits for this survey; however, we did use SIPP for some of our imputations to the March CPS.

<sup>27</sup> See [Chapter 5](#) on the reason for higher poverty rates with a 0.65 scale economy factor.



Tax Credit that is scheduled to take full effect in 1996: adjusted to 1992, the result would be to reduce the poverty rate under the proposed measure from 18.1 to 17.2 percent (using a \$14,800 reference family threshold and 0.75 scale economy factor).

The proposed measure will also more accurately reflect the effects of any welfare reform that puts a time limit on the receipt of benefits and thereafter requires recipients to work. If the jobs obtained by former welfare recipients include child care and health insurance benefits, the proposed measure would likely show a different poverty rate than if the jobs do not provide such benefits; the current measure would not distinguish between those situations.

### Needed Data

Clearly, the availability of relevant, high-quality, and timely data is critical for determining the poverty rate, in order to estimate resources for a representative sample of families and individuals to compare with the appropriate poverty thresholds. The survey that has supplied the United States with its income and poverty statistics is the March income supplement to the CPS. The March CPS has served the nation well, but it is inherently limited in the extent and quality of data that it can provide because it is a supplement to a continuing survey of the labor force that is the basis of the official monthly unemployment rate. Its major focus is on unemployment, not poverty.

The March CPS currently obtains information on a family's previous year's income from a large number of sources, and it also asks about receipt of benefits from the major in-kind programs. However, it does not ask about taxes, medical care costs, child support, work expenses, or assets. It also does not provide information for constructing poverty measures for periods other than a calendar year.

To remedy these deficiencies in the March CPS and to improve the quality of income reporting, SIPP was begun in 1983. Although SIPP had start-up problems, including cuts in sample size, it has largely achieved the goal of providing a richer set of higher quality data on income and related topics than the March CPS. One of the criticisms of using income rather than actual expenditures as the measure of resources is that income reporting errors in surveys lead to an overestimate of the poverty rate. However, poverty estimates calculated from SIPP, with more complete income reporting for lower income families than in the March CPS, are comparable to estimates developed from the CEX that use a consumption or expenditure concept of resources (see [Chapter 5](#)). Also, a number of improvements will be made to SIPP, beginning in 1996—including an expansion of the overall sample to about that of the March CPS—that will further strengthen it.

The proposed changes to the family resource definition, and continued research on various aspects of the resource definition (e.g., valuation of home

ownership services), will increase the data needed for measuring poverty. SIPP, with its focus on income data, is in a position to respond to these needs; the March CPS, which must always be geared primarily to the requirements of the nation's main labor force survey, is not. Hence, we recommend that SIPP become the basis of the nation's official income and poverty statistics in place of the March CPS. This change should take effect when the slated improvements to SIPP are introduced in 1996.

A decision to use SIPP to produce the official poverty rates means that the SIPP design and questionnaire must be reviewed to determine if modifications are needed to enhance the survey's ability to provide accurate statistics under the proposed measure. (A panel that recently evaluated SIPP made a similar recommendation about using SIPP for income and poverty statistics [Citro and Kalton, 1993:85-87], and many of its recommendations on the SIPP design and questionnaire are relevant.)

In regard to the overall SIPP design, we are concerned that the Census Bureau's decision for 1996 to have new samples ("panels") introduced every 4 years, each of which is followed for a 4-year period, may be problematic for providing a reliable time series of annual poverty statistics because of biases that result from attrition from the samples over time. Every 4 years there may be a break in the time series because of the introduction of a new sample; in addition, because there is no overlap between the samples, it will be difficult to evaluate whether the changes in the poverty rate are real or not.

Such a nonoverlapping design also limits the usefulness of SIPP to analyze important policy changes, such as changes in welfare programs or health care financing: if policy changes take effect near the beginning or end of a 4-year sample, there is limited information available either before or after the change to adequately evaluate its effects. The SIPP evaluation panel recommended that SIPP samples be followed for 4 years but that a new sample be introduced every 2 years. Poverty rates under this design may also be affected by attrition and other biases, but, with the sample overlap, it will be possible to evaluate and, one hopes, adjust for the effects. Also, under this design, a new sample is in the field every 2 years, which should facilitate analysis of policy changes.<sup>28</sup>

It is important to carry out methodological research that can lead to yet further improvements in SIPP data quality for purposes of poverty measurement. A high priority is research to improve the population coverage in SIPP (and other household surveys), especially among lower income minority groups, particularly young black men (the Census Bureau has such research

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<sup>28</sup> The disadvantage for longitudinal analysis of the overlap design recommended by the SIPP panel is that the sample size is half that of the design of 4-year samples with no overlap; however, for the estimation of annual poverty statistics, the total sample size of the overlap design, added across the two samples in the field each year, is the same as that of the nonoverlap design.

under way). These groups are missed at high rates in surveys relative to estimates derived from the decennial census because they are not reported as household residents. We note, however, that SIPP (and other household surveys) will necessarily overlook some population groups who may be particularly at risk of poverty, including the homeless and people in institutions. The decennial population census (see below) includes these groups, although coverage is far from complete.

**RECOMMENDATION 5.1. The Survey of Income and Program Participation should become the basis of official U.S. income and poverty statistics in place of the March income supplement to the Current Population Survey. Decisions about the SIPP design and questionnaire should take account of the data requirements for producing reliable time series of poverty statistics using the proposed definition of family resources (money and near-money income minus certain expenditures). Priority should be accorded to methodological research for SIPP that is relevant for improved poverty measurement. A particularly important problem to address is population undercoverage, particularly of low-income minority groups.**

To aid in making the transition to a SIPP-based series of official poverty statistics and to help evaluate that new series, it would be helpful for the Census Bureau to produce a concurrent time series of poverty rates from the March CPS on the basis of the proposed measure. Both the SIPP and the March CPS series should be extended backward to 1984, when SIPP was first introduced. Also for the foreseeable future, the Census Bureau should issue public-use files from both SIPP and the March CPS that include values for the thresholds under the new concept and estimates of disposable income (and its components) under the new resource definition. The availability of such files will enable researchers to conduct poverty analyses with either survey.

**RECOMMENDATION 5.2. To facilitate the transition to SIPP, the Census Bureau should produce concurrent time series of poverty rates from both SIPP and the March CPS by using the proposed revised threshold concept and updating procedure and the proposed definition of family resources as disposable income. The concurrent series should be developed starting with 1984, when SIPP was first introduced.**

**RECOMMENDATION 5.3. The Census Bureau should routinely issue public-use files from both SIPP and the March CPS that include the Bureau's best estimate of disposable income and its components (taxes, in-kind benefits, child care expenses, etc.) so that researchers can obtain poverty rates consistent with the new threshold concept from either survey.**

Many other federally sponsored surveys besides SIPP and the March CPS provide income and poverty variables for analysis purposes: examples include the American Housing Survey, Consumer Expenditure Survey, National Health Interview Survey, National Medical Expenditure Survey. However, these surveys, which are focused on other topics, cannot usually afford the questionnaire space needed to collect all of the information needed for an accurate estimate of disposable money and near-money income. Research on the most appropriate set of income questions to include in such surveys would be useful. With limited space, it may be preferable to ask questions about expenses that need to be deducted from gross income, rather than to ask detailed questions about the sources of that income. Even more important is research on methods to develop poverty estimates from limited income information that approximate the estimates that would be obtained under a disposable income definition from a detailed survey like SIPP.

**RECOMMENDATION 5.4. Appropriate agencies should conduct research on methods to develop poverty estimates from household surveys with limited income information that are comparable to the estimates that would be obtained from a fully implemented disposable income definition of family resources.**

Another source of income and poverty statistics is the U.S. decennial census. It provides data every 10 years for small geographic areas for which reliable estimates cannot be obtained in household surveys. Small-area poverty estimates serve many important purposes, for example, to allocate federal funds to local school districts. Questionnaire space in the decennial census is even more limited than in most surveys: the 1990 census asked about 8 types of income, compared with more than 30 in the March CPS and more than 50 in SIPP. No information was obtained about taxes, in-kind benefits, medical costs, child support, work expenses, or assets. We encourage research on methods to adjust census small-area poverty estimates to more closely approximate the estimates that would result from using our proposed family resource definition. Also, while recognizing the constraints on the census questionnaire, we urge serious consideration of adding perhaps one or two simple yes-no questions—for example, whether a family received food stamps or paid for child care in the past year—that would facilitate such adjustments.

**RECOMMENDATION 5.5. Appropriate agencies should conduct research on methods to construct small-area poverty estimates from the limited information in the decennial census that are comparable with the estimates that would be obtained under a fully implemented disposable income concept. In addition, serious consideration should be given to adding one or two questions to the decennial census to assist in the development of comparable estimates.**

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Finally, with regard to data sources, we believe it is vitally important to improve the available data on consumer expenditures, an area in which the United States lags behind other developed countries. Our evaluation of alternative methods for updating poverty thresholds was hampered by the fact that the United States did not have a continuing consumer expenditure survey until 1980. Moreover, small sample sizes in the present CEX impair its usefulness for developing poverty budgets and completely preclude its use for measuring family resources. The CEX also has data quality problems, such as high nonresponse rates by sample households, high rates of recall error, and underreporting of expenditures and income. We urge BLS to conduct (or commission) a study that evaluates the CEX and assesses the costs and benefits of changes to the survey that could make it more useful for poverty measurement and for other important analytical uses related to the understanding of consumption, income, and saving. It would be especially useful if improvements to the survey could be made in time for the next 10-year review of the poverty measure.

**RECOMMENDATION 5.6. The Bureau of Labor Statistics should undertake a comprehensive review of the Consumer Expenditure Survey to assess the costs and benefits of changes to the survey design, questionnaire, sample size, and other features that could improve the quality and usefulness of the data. The review should consider ways to improve the CEX for the purpose of developing poverty thresholds, for making it possible at a future date to measure poverty on the basis of a consumption or expenditure concept of family resources, and for other analytic purposes related to the measurement of consumption, income, and savings.**

### Other Issues in Poverty Measurement

#### Time Period

The current measure of poverty compares family income for a year with a budget that reflects a year's worth of expenditures. This annual accounting period is very familiar to policy makers and the public and is quite appropriate for evaluating the effect on poverty of provisions of the tax code (e.g., the Earned Income Tax Credit) and programs that are designed to provide long-term income support (e.g., Social Security and SSI for the elderly and disabled). We believe it makes sense for the official measure to continue to use an annual accounting period.

In addition to the official measure, however, there are needs for supplementary poverty measures with shorter and longer accounting periods than a year. Many assistance programs (e.g., AFDC and food stamps) provide benefits to people who are experiencing short spells of poverty. The use of an

annual poverty measure for evaluating these programs may be misleading: an annual measure may suggest that the programs are providing benefits to people above the poverty line when, in fact, those people were poor for part of a year and hence eligible for support. An appropriate poverty measure for evaluating such programs also needs to take account of assets because of the requirement that families use up most of their accumulated assets before they can obtain program benefits.

SIPP provides data to construct subannual poverty measures that would be suitable for evaluating the effects of such programs as AFDC and food stamps. Given some of the features of the SIPP design, we suggest that a feasible measure might use a 4-month accounting period and add to income any financial assets that the family reports, such as savings accounts (after first subtracting the income from such assets). These 4-month measures might also serve as an indicator of short-term increases or decreases in economic distress, although it may be that other readily available data, such as monthly food stamp caseloads, could serve this purpose.

There are also important uses for measures that assess poverty over multi-year periods. There is strong evidence that people who experience long spells of poverty are worse off—not only economically, but also in other respects such as health status and educational attainment—than those who experience short spells. Also, long-term poverty appears concentrated in particular groups of the population, particularly minorities and the disabled. Policies and programs for ameliorating long-term poverty are likely to differ from those aimed at helping people through a temporary economic crisis.

There is no agreement on the basis of research on the best form of a long-term poverty measure. It is also not clear how often a long-term poverty measure needs to be updated. The design of SIPP makes it possible to develop estimates of the number of poor in a given year who are still poor 1, 2, and 3 years later. The Panel Study of Income Dynamics permits developing poverty measures for much longer periods, but with small sample sizes. Clearly, further research and the development of some experimental series would be useful.

**RECOMMENDATION 6.1.** The official poverty measure should continue to be derived on an annual basis. Appropriate agencies should develop poverty measures for periods that are shorter and longer than a year, with data from SIPP and the Panel Study of Income Dynamics, for such purposes as program evaluation. Such measures may require the inclusion of asset values in the family resource definition.

### Unit of Analysis

The current poverty measure defines thresholds and aggregates resources for families of various sizes and for adults who live alone or with other people not

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related to them.<sup>29</sup> In other words, the assumption is made that family members pool their resources to support consumption and thereby achieve economies of scale. Unrelated individuals, in contrast, are assumed not to share resources with others, even if they live with one or more roommates.

Although some researchers have criticized the assumption that all family members have access to their "fair share" of the family's resources, data limitations make it infeasible at this time to consider defining the unit of analysis for poverty measurement as an individual, so we recommend continuing to use the family as the unit of analysis. We also recommend that the definition of "family" be broadened to include cohabiting couples, as they maintain longer lasting relationships than other roommates and are likely to pool resources. In the case of roommates as such, there are no data on the extent of resource sharing among them. We encourage research on this topic, and more generally on resource sharing among household and family members.

**RECOMMENDATION 6.2. The official measure of poverty should continue to use families and unrelated individuals as the units of analysis for which thresholds are defined and resources aggregated. The definition of "family" should be broadened for purposes of poverty measurement to include cohabiting couples.**

**RECOMMENDATION 6.3. Appropriate agencies should conduct research on the extent of resource sharing among roommates and other household and family members to determine if the definition of the unit of analysis for the poverty measure should be modified in the future.**

### Other Measures

Considerable thought has been given in the research literature to the development of poverty statistics that provide more information than the simple head-count ratio (the poverty rate or proportion of people who are poor). Thus, it would be useful to have a statistic that reflects the depth of poverty, by measuring, for example, the average income of the poor. It would also be useful to have a poverty statistic that increases when resources are less equally distributed among the poor.

The simple head-count ratio—although readily understandable—has some drawbacks. For example, if income were taken from some very poor people to move a few less-poor persons out of poverty, the effect would be to *reduce* the head count, even though the depth of poverty had become worse. Yet statistics that attempt to capture several dimensions of poverty in a single index

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<sup>29</sup> Poverty is not defined for unrelated individuals under age 15, as no information is obtained about their income in surveys.

very quickly become impenetrable, with the result that it is hard to interpret what changes in them mean to policy makers and the public (and even to researchers).

We see the need for additional information besides the head-count ratio, but we believe it is best to provide such information in simpler, more disaggregated form, as is already done to a large extent in Census Bureau reports. These reports show the poverty gap, or the aggregate amount of income by which poor people fall below the poverty line, and it would be easy to provide the obverse, namely, the average income of the poor compared with an average weighted poverty threshold. (Because there are different thresholds for different types of families, statistics on the average income of the poor need to be calculated for each type separately or by comparing the average income for all poor people to an average weighted threshold that reflects the composition of the poor by family type.) Census Bureau reports also provide information on the proportions of people with income below varying ratios of the poverty line (e.g., below 50%, 75%, 100%, 125%), thereby indicating the distribution of poverty among the poor and, in the case of ratios of income that exceed the poverty line, the extent of near poverty.

These indicators must be interpreted carefully: for example, the poverty gap is not an actual measure of the amount of money that the government would have to spend to eliminate poverty (see below). Also, the number of people who are very far below the poverty line may be overestimated because of underreporting of income or the reporting of business losses by self-employed people. Nonetheless, such indicators can enrich understanding of the nature and scope of economic poverty in the United States and how it changes over time.

We also believe it would be useful to publish poverty statistics on the basis of measures in which family resources are defined net of government taxes and transfers. Several such measures could be useful: one in which resources are defined in before-tax terms, one in which resources are net of taxes but exclude benefits from means-tested government programs (whether cash or in-kind), and one in which resources exclude benefits from all government programs, whether means tested or not. Again, the statistics from such measures must be interpreted with care: the poverty rate in a world without government taxes or government assistance programs would likely differ from the rate under these measures. Nonetheless, when compared with the new official measure, such before-tax and transfer measures would be helpful for evaluating the effects of government policies and programs on poverty.

**RECOMMENDATION 6.4. In addition to the basic poverty counts and ratios for the total population and groups—the number and proportion of poor people—the official poverty series should provide statistics on the average income and distribution of income for the poor. The count and other statistics should also be published for poverty**

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**measures in which family resources are defined net of government taxes and transfers, such as a measure that defines income in before-tax terms, a measure that excludes means-tested government benefits from income, and a measure that excludes all government benefits from income. Such measures can help assess the effects of government taxes and transfers on poverty.**

Finally, we note the importance of having indicators of deprivation other than economic—physical, psychological, and social deprivation. A measure of economic poverty is undoubtedly a key social indicator. It is important in its own right as a barometer of the extent to which there is a segment of U.S. society that lacks the means to obtain basic economic necessities; it is also important because it correlates highly with other aspects of deprivation, such as poor health and low educational levels. But an economic poverty measure cannot feasibly encompass other types of deprivation. Instead, other measures need to be developed to directly assess the well-being of the population on a number of dimensions and to help focus public and private-sector policies to ameliorate deprivation. We encourage research and development on a range of deprivation indicators.

## **USE OF THE POVERTY MEASURE IN GOVERNMENT PROGRAMS**

The current official poverty measure plays a role in determining eligibility for a number of government assistance programs, and it is important to consider how or if the proposed measure is appropriate for program use.<sup>30</sup> We first examine the implications of linking the proposed measure to program eligibility. We then look at the relationship of the proposed measure to benefit standards for the AFDC program, for which we were asked to consider issues involved in establishing a national minimum benefit standard.<sup>31</sup>

### **The Poverty Measure and Program Eligibility**

#### **Need Standards for Programs That Use the Official Measure**

Of 70 federal and federal-state programs that provide cash or in-kind benefits to people on the basis of an explicit test of low-income, 27 programs link their need standard for eligibility to the U.S. Department of Health and Human

<sup>30</sup> The descriptions of programs and program eligibility standards are as of the time when this report was prepared; they do not reflect any changes after 1994.

<sup>31</sup> Another program use of the poverty measure is for allocation of federal funds to states and localities through formulas: for example, the allocation of funds for educationally deprived children to school districts on the basis of their share of children age 5 to 17 who live in poor families. This use of the poverty measure raises important issues, including that of data availability, but is beyond the scope of this report.

Services (HHS) poverty guidelines, which are derived from the official poverty thresholds. Examples include food stamps, Head Start, Legal Services, Maternal and Child Health Services, Medicaid, and the School Lunch and Breakfast Programs (Burke, 1993). Some programs (e.g., food stamps, Medicaid) have several criteria for eligibility: applicants who are already participating in another program, such as AFDC, may be automatically eligible, while other applicants can qualify on the basis of comparing their income to the poverty guidelines (or a multiple of them).

The use of the proposed poverty measure in these programs would be an improvement in several respects over the current measure for the purpose of targeting benefits to needy families. The proposed measure has an internally consistent equivalence scale by which to adjust the poverty thresholds for different types of families, it reflects geographic differences in the cost of housing in the thresholds, and its definition of family resources as disposable money and near-money income is consistent with the basic needs concept underlying the thresholds. This consistency means that two families with the same gross income would not be mistakenly treated as having the same income for consumption when one of them had nondiscretionary expenses (such as taxes or child support payments) and the other did not.

However, program agencies should carefully consider whether the proposed measure may need to be modified to better serve program objectives. For example, the proposed family resource definition is considerably more data intensive than the current definition. Full implementation would require asking about in-kind benefits and several types of expenses, as well as money income. For such programs as food stamps that require a very detailed determination of both gross and net or "countable" income in order to determine financial eligibility and benefit amounts, implementing the proposed definition of family resources would not complicate program administration—indeed, that definition, in concept, if not in precise details, is quite similar to the definition already in use.

In contrast, other programs have a simple application procedure that obtains a crude measure of gross money income for purposes of eligibility determination. Many of these programs provide an all-or-nothing service—an example is Head Start, which offers an enrichment program to preschool children in families with income below the poverty threshold. Other programs with relatively simple application procedures charge recipients for services on a sliding scale, depending on the broad income-to-poverty ratio category into which the family falls. In these cases, to fully implement the proposed family resource definition could pose a burden on applicants and program administrators. However, we believe there are ways to simplify the proposed definition for programs for which a simple application process is valued and where there is a willingness to trade off the loss of some precision in classifying an applicant's eligibility status.

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With respect to the threshold or need standard component of the proposed measure, program agencies must consider whether to use 100 percent of the thresholds as the cutoff for eligibility or a multiple of them, as is now specified in many programs. Obviously, there are budgetary implications of this choice, particularly for entitlement programs that must provide benefits for all applicants who meet the eligibility criteria (in contrast to programs with a legislatively set budget that requires program administrators to put eligible applicants on a waiting list once the budget is exhausted). In this regard, it is critical to consider the implications for programs of the recommendation to update the thresholds each year for real changes in consumption of basic goods and services. The thresholds developed under this procedure will not likely increase as fast as would a purely relative set of thresholds (because the procedure considers only the categories of food, clothing, and shelter, not all goods and services). However, the thresholds developed under the proposed procedure will likely increase faster than thresholds that are simply adjusted by the CPI, like the official ones, if real growth occurs.

There are ways to address the budgetary consequences of poverty thresholds that are updated in real terms. For example, program eligibility could be limited to families with resources below a fraction of the thresholds. This type of strategy is not a contradiction in terms. Although updating the poverty thresholds for real growth in basic consumption makes a great deal of sense for a statistical measure, the design of government assistance programs must take into account many factors, only one of which is a statistical standard of need. Other considerations, such as funding constraints and competing uses for scarce tax dollars, may dictate assistance program eligibility levels that are lower than the statistical poverty thresholds.

Finally, there are some other features of the proposed poverty measure that may not be suitable for program use. For example, we propose that need be measured on an annual basis and that asset values not be included in family resources. However, many programs (e.g., food stamps) use a subannual accounting period together with an asset test because they are intended to provide immediate assistance to people who are in a crisis situation. Also, we propose that the unit of analysis be the family, as defined by the Census Bureau, but programs differ in their target populations and hence often in their definition of an eligible unit. Such differences from the proposed statistical poverty measure are quite appropriate in light of program objectives.

**RECOMMENDATION 7.1. Agencies responsible for federal assistance programs that use the poverty guidelines derived from the official poverty thresholds (or a multiple) to determine eligibility for benefits and services should consider the use of the panel's proposed measure. In their assessment, agencies should determine whether it may be necessary to modify the measure—for example, through a**

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**simpler definition of family resources or by linking eligibility less closely to the poverty thresholds because of possible budgetary constraints—to better serve program objectives.**

### **Need Standards for AFDC**

In most government assistance programs, the benefit standard—that is, the maximum amount of benefits provided to people with no other income—and the eligibility or need standard are the same. People who are eligible because their countable income falls below the benefit standard are entitled to receive benefits up to the amount of the standard.<sup>32</sup> AFDC is unique in that federal legislation requires each state to establish a standard of need for families with no other means of support. In a separate process, each state determines the maximum benefit that it will actually pay to such families, which does not have to equal the state's need standard. As prescribed by federal statute, the need standard restricts eligibility for AFDC: currently, families must have gross income below 185 percent of the state need standard to be eligible to receive benefits. In addition, they must have net countable income (as defined by federal law) below 100 percent of either the state need standard *or* the state payment standard, whichever is lower. As of January 1994, 40 states had a maximum benefit that was below their need standard (in some states the maximum benefit was below both their need and payment standards; U.S. House of Representatives, 1994: Table 10-11; see also Solomon and Neisner, 1993: Table 1).

Historically, there has been great variation among the states in how they derive their need standard, in how often and by what method they update it, in how benefits relate to the need standard, and in the level of the need standard. The differences in state AFDC need standards are much wider than can be explained by differences in the cost of living across states, even allowing for the problems with subnational cost-of-living indicators (see, e.g., Peterson and Rom, 1990).

One could argue that the level of the need standard is irrelevant to families' welfare because states are not required to pay benefits at that level—and three-quarters do not. It is also true that welfare policy is currently in a state of flux: the AFDC program as it has operated historically may change in significant ways, possibly rendering moot the question of the soundness or adequacy of the need standard for the current program. Nonetheless, until the program is changed, there is a requirement that the states develop a need standard, which is important for several reasons: it sets limits for eligibility; it is linked to benefits, directly in those states that pay 100 percent of need and

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<sup>32</sup> Strictly speaking, this statement applies to cash benefit programs (e.g., SSI, veterans' pensions). Near-cash programs (e.g., food stamps and assisted housing) have a benefit standard that falls below the eligibility standard because the benefit pertains to a single commodity.

indirectly in other states; and it offers a goal or target against which to assess the adequacy of benefits.

The question is whether it makes sense for states to adopt the proposed poverty measure in place of their own need standard. A related recent development in standard setting practices is that 14 states have explicitly geared their need standard to the current poverty guidelines. In many of these states, the link is more theoretical than actual in that the need standard, either by law or regulation or because of failure to adjust for inflation, is a small fraction of the poverty guidelines. In other states, the definition of the poverty guidelines has been altered to exclude some types of consumption. Still, a growing number of states have found it convenient to link their AFDC need standard in some fashion to the poverty guidelines. We believe the proposed measure represents an improvement over the current measure for this purpose, and we encourage states to consider its use.

The proposed budget concept correlates well with the objectives of the AFDC program to provide the means for low-income families to obtain basic necessities. The exclusion of medical care needs from the proposed budget concept is consistent with the separate provision of medical care to AFDC families through the Medicaid program. In many respects, the proposed definition of family resources is similar to the AFDC definition of countable income, such as the treatment of work-related expenses, including child care, as deductions from family resources rather than as part of the poverty budget. In addition, the proposed measure includes an improved equivalence scale and reflects area differences in housing costs.

The 1988 Family Support Act requires states to review their need standard every 3 years and report to HHS. In the next review, states could consider the possible use of the proposed poverty measure as a need standard for AFDC. In their review, the states would need to look at the implications of the proposed measure—both the thresholds and the definition of family resources—in relation to their current need standards (whether the current poverty guidelines or the states' own standards). They would also need to consider whether the proposed measure may need to be modified in one or more respects to be more suitable for program purposes. It may be that, for budgetary or other reasons, states will decide to set the need standard at different fractions of the poverty threshold. Nonetheless, having a link between state need standards and the proposed poverty measure would be a major step toward providing a common framework for determining AFDC eligibility and evaluating eligibility levels across states.

**RECOMMENDATION 8.1. The states should consider linking their need standard for the Aid to Families with Dependent Children program to the panel's proposed poverty measure and whether it may be necessary to modify this measure to better serve program objectives.**

### The Poverty Measure and AFDC Benefit Standards

State AFDC benefit standards vary even more widely than do state AFDC need standards, and no state provides benefits as generous as the official poverty thresholds. From time to time, there have been efforts to enact a federal minimum benefit standard for AFDC. These efforts have invariably come to naught, largely because of the cost implications of raising the benefit standard in states with low-benefits. Changes in the percentage of benefits that the federal government will reimburse the states have been enacted with the intent of providing incentives for low-benefit states to increase their benefits; however, these changes in the matching formula have had little effect on the variation in benefit levels among the states (Peterson and Rom, 1990).

AFDC recipients are eligible for food stamps, and the nationalization of the Food Stamp Program has served to reduce the disparities in combined AFDC and food stamp benefits across the states.<sup>33</sup> However, significant differences still remain that exceed what can be reasonably attributed to cost-of-living differences among the states. Thus, the maximum combined AFDC and food stamp benefit for a three-person family in January 1994 varied from \$1,208 in Alaska to \$415 in Mississippi; the median benefit was \$658, which is 69 percent of the corresponding official 1993 poverty threshold (U.S. House of Representatives, 1994: Table 10-11).

Currently, a de facto national minimum level of available benefits exists for AFDC recipients, namely, the maximum food stamp allowance combined with the maximum AFDC benefit in the lowest benefit state. (In January 1994, this amount for a three-person family was 43% of the corresponding official 1993 poverty threshold.) Hence, the issue of a national minimum benefit standard for AFDC really comes down to an issue of raising this de facto standard. Arguments for adopting such a nationwide minimum benefit standard for AFDC have been made on the basis of equity—namely, that low-income families with children should not be disadvantaged simply by reason of their state of residence. Arguments have also been offered that differences in benefits encourage low-income families to migrate from low-benefit to high-benefit states. The studies that have been done on the migration effects of AFDC suffer from serious data and methodological problems, but they suggest that the effect on migration of low-income families is quite small.

The question of how or if the proposed poverty measure, for which the thresholds vary much less across states than do AFDC need and benefit standards, should be linked with program benefits (for AFDC or a combination of assistance programs) is a difficult one. There are several reasons that a benefit

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<sup>33</sup> This evening-out occurs because the food stamp benefit formula decreases food stamp benefits by 30 cents for every dollar increase in AFDC benefits and, conversely, increases food stamp benefits by 30 cents for every dollar reduction in AFDC benefits.

standard could differ from a poverty standard and, more generally, why the design of an assistance program could deviate from the goal of helping everyone who is classified as poor. First, scarce budget resources (and competition for them from other programs) may well limit the extent to which payments can approach the poverty threshold; in state-federal programs (such as AFDC), the nature of the state-federal cost sharing provisions has an important effect on funding constraints.

Second, there may be reasons to target payments on particular groups in order to maximize the effectiveness of limited funds and achieve other policy goals. For example, because of the social cost of children growing up in economic deprivation, it may be sensible to concentrate assistance dollars on poor families with children, even though other groups have measured need that is just as great. Or it may make sense to concentrate scarce assistance dollars on the poorest families, even though helping the families closest to the poverty line would achieve the fastest reduction in measured need.

Third, the existence of multiple assistance programs can affect the level of the benefit standard that makes sense for any one of them. For example, AFDC interacts with food stamps and public housing, among other programs, and it makes little sense to think of an AFDC benefit standard in isolation from other programs. Finally, incentive effects drive a wedge between measured need and the amount of program dollars needed to alleviate need. For example, families who are provided benefits designed to raise them above the poverty line may reduce their work effort so that the net effect is to leave them in poverty. Behavioral effects of program benefits are, indeed, the reason that it is misleading to describe the aggregate "poverty gap"—the difference between the poverty line and a family's resources, aggregated over all families—as the dollar amount that the government would have to spend to eliminate poverty.

The question of incentives is one of the most difficult issues that policy makers face in designing assistance programs to serve multiple goals, such as alleviating need while containing costs and discouraging dependency. The task is made more difficult by the fact that research findings on incentive effects are sometimes incomplete or inconclusive. Issues of program incentives have been at the center of the policy debate about AFDC, which is directed to families that the public would like to see increasingly responsible for their own support. Consequently, there has been considerable experimentation with changes in benefit levels and formulas for calculating disposable income to try to induce AFDC families to become more stable and self-supporting. To date, results show limited effects of changes in benefit levels and the tax rate on earnings on such behaviors as work effort. The findings are not yet available on more recent state initiatives, such as not increasing benefits when another child is born or reducing benefits if parents do not stay in school or fail to have their children vaccinated. It is important also to note that other

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programs besides AFDC raise concerns about incentives; for example, Social Security and SSI have negative effects on work effort (see [Chapter 8](#)).

For all of these reasons, it is not possible, on any theoretical or strictly scientific grounds, to link poverty thresholds directly to benefits. To the many people involved in evaluating and designing public assistance programs, this conclusion may seem obvious. However, we believe it is worth restating the obvious to underscore the point that measuring need, by determining how many people have resources below a reasonable poverty standard, is different from determining the proper societal response to that need.

In sum, many factors properly enter into a determination of program benefit standards, including judgements about the extent to which society is prepared to allocate scarce resources to support low-income people and the mix of goals that society wants government assistance programs to serve. The critical role of such judgements is the reason that a panel such as ours, chosen for expertise in measurement issues, cannot make recommendations about appropriate benefit levels for specific assistance programs. However, the fact that we do not make a recommendation about national minimum benefit standards for AFDC (or other programs) should not be taken to mean that there is no case for reducing the wide variation in AFDC benefits across the states. Rather, as a panel on poverty measurement, our position on the issue of benefit levels for assistance programs is necessarily neutral.

In conclusion, we urge policy makers at the federal and state levels to carefully consider all of the issues involved in the current debate about the nation's welfare policy. Ultimately, the determination of appropriate programs and policies to alleviate poverty involves "politics" in its best sense—namely, the consideration of competing public objectives against the constraints of scarce public resources within the framework of a nation's social and political system.

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